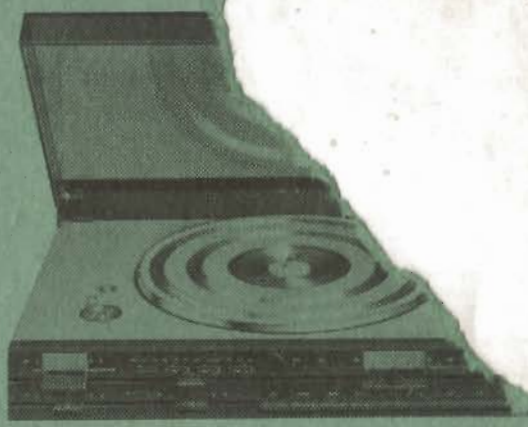
Bang & Olufsen



BEOCENTER 1800
TYPE 2610

BEOMASTER 1100
TYPE 2609

Ryland Inc.
RADIO & TELEVISION

SERVICE MANUAL

CONTENTS SECTION

Technical data 1
Diagrams, PC-boards, colour of wires, transistor list, diode and IC list 2
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Mechanical parts list 6
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Beomaster 1100, type 2609 8

Bang & Olufsen

TECHNICAL DATA

AMPLIFIER

Power output 1000 Hz RMS	2 x 22 watts / 4 ohms
	2 x 19 watt / 8 ohms
Music power	2 x 40 watts / 4 ohms
	2 x 25 watts / 8 ohms
Speaker impedance	4 ohms
Harmonic distortion	
1000 Hz 50 mW DIN 45 500	< 0,1%
1000 Hz at stated output	< 0.5%
Intermodulation DIN 45 500	< 1%
Frequency range ± 1.5 dB DIN 45 500	20-30.000 Hz
Power bandwidth DIN 45 500	10-35.000 Hz
Damping factor 1000 Hz DIN 45 500	> 12
Input pick-up low impedance	2,5 mV / 47 kohms
2 channel high impedance	140 mV / 700 kohms
Signal-to-noise ratio DIN 45 500	
50 mW, pickup low impedance	> 50 dB
Channel separation 1000 Hz DIN 45 500	> 55 dB
Output tape recorder 1000 Hz DIN 45 500	100 mV / 100 kohms
Headphones	Max. 10 V / 200 ohms
Bass control at 40 Hz	± 17 dB
Treble control at 12.500 Hz	± 14 dB

FM TUNER

FM Range	87.5 - 104 MHz
Sensitivity 26 dB, ± 40 kHz	< 1.8 µV / 75 ohms
Sensitivity IHF	< 2.5 µV / 75 ohms
Limiting —3 dB ± 40 kHz	< 1.5 µV / 75 ohms
Signal-to-noise ratio DIN 45 500	> 65 dB
Selectivity IHF	> 65 dB
Frequency range ± 1.5 dB DIN 45 500	20-15.000 Hz
Harmonic distortion DIN 45 500	< 0.5%
Stereo channel separation DIN 45 500	> 30 dB
Pilot suppression 19 kHz	> 35 dB
38 kHz	> 35 dB

RECORD PLAYER

Speeds	33 - 45 rpm
Automatic pickup movement	Yes
Automatic speed selection	Yes
Wow and flutter, DIN	< ± 0,12%
Wow and flutter, WRMS	< ± 0,06%
Rumble DIN unweighted	> 37 dB
Rumble DIN weighted	> 60 dB
Speed deviation	< 0.1 %
Speed control range	> 3%
Dial for speed	Stroboscope 120 mm
Stylus pressure range	0-2.5 gram
Tangential tracking	0.125° / cm
Lift system	Mechanical
Antiskating	Inclined channelling, inside bearing
Motor	Asynchronous
Drive system	Idler wheel and belt
Turntable	30 cm 1 kg
Dust cover	Hinged and detachable
Frequency	50 Hz

PICK-UP MMC 3000

Stylus	Spherical diamond
Radius of curvature	15 um
Frequency range	16-25,000 Hz ±3 dB
	20-16,000 Hz ± 2.5 dB
Channel separation 1000 Hz	> 28 dB
400-10,000 Hz	> 15 dB
Channel difference	< 2 dB
Intermodulation	< 1%
Recommended stylus pressure	1.2 gram
Compliance	25 x 10^{-6} cm / dyne
Effective tipmass	0.5 mg

OTHER DATA

Power supply	110-130-220-240 volts
Power consumption	20-170 watts
Dimensions W x H x D	50 x 12 x 37 cm
Weight	13 kg

Subject to change without notice

MÅLEBETINGELSER FOR DIAGRAM

Alle DC spændinger er målt i forhold til stel med voltmeter (indre modstand 11 MOhm).
DC spændingerne er målt med modtageren i stilling FM og antennesignal på 500 µV (1 mV EMK) med pilottone, volume på 0.
FM følsomheder er målt ved Δ f 40 kHz, f mod. 1 kHz og 10W output.
LF følsomheder er målt ved 22W output. Balance, bas, diskant på 0, volume på max. Udgang belastet med 4 Ohm, input 1 kHz.
Mekaniske omskiftere er vist i neutral stilling.

FM FØLSOMHEDER

2TP1	60 µV (10,7 MHz) gennem 0,1 µF, RG 75 Ohm.
2TP2	170 µV (10,7 MHz) gennem 0,1 µF, RG 75 Ohm.
2TP3	600 µV (10,7 MHz) gennem 0,1 µF, RG 75 Ohm.

LF FØLSOMHEDER

4TP100	2,5 mV
4TP200	2,5 mV
2TP100	135 mV
2TP200	135 mV
2TP101	150 mV
2TP201	150 mV
5TP100	500 mV
5TP200	500 mV

TOMGANGSSTRØM

5TP101	10 mV
5TP201	10 mV eller:

25 mA i kollektoren af 5IC101, 5IC201.

CONDITIONS OF MEASUREMENT FOR DIAGRAM

All DC voltages are measured in proportion to chassis with voltmeter (inner resistance 11 MOhms).
DC voltages are measured with the receiver in position FM and an aerial Signal of 500 µV (1 mV EMK) with pilot signal, volume on 0.
FM sensitivities are measured at Δ f 40 kHz, f mod. 1 kHz and 10W output.
AF sensitivities are measured at 22W output. Balance, bass, treble on 0, volume on max.
Output loaded with 4 Ohms, input 1 kHz.
Mechanical switches are shown in neutral position.

FM SENSITIVITIES

2TP1	60 µV (10.7 MHz) through 0.1 µF, RG 75 Ohms.
2TP2	170 µV (10.7 MHz) through 0.1 µF, RG 75 Ohms.
2TP3	600 µV (10.7 MHz) through 0.1 µF, RG 75 Ohms.

AF SENSITIVITIES

4TP100	2.5 mV
4TP200	2.5 mV
2TP100	135 mV
2TP200	135 mV
2TP101	150 mV
2TP201	150 mV
5TP100	500 mV
5TP200	500 mV

NO-SIGNAL CURRENT

5TP101	10 mV
5TP201	10 mV or:

25 mA in the collector of 5IC101, 5IC201.

MESSBEDINGUNGEN FÜR SCHALTBILD

Alle DC Spannungen sind in Verhältnis zu Chassis mit Voltmeter (innerer Widerstand 11 MOhm) gemessen.
DC Spannungen sind mit dem Empfänger in Stellung FM und dem Antennensignal von 500 µF (1 mV EMK) mit Pilotton gemessen, Volume auf 0.
UKW Empfindlichkeiten sind an Δ f 40 kHz, f mod. 1 kHz und 10W Ausgang gemessen.
NF Empfindlichkeiten sind an 22W Ausgang gemessen. Balance, Tiefton, Diskant auf 0, Volume auf max. Ausgang mit 4 Ohm, Eingang 1 kHz belastet.
Mechanische Umschalter sind in neutraler Stellung gezeigt.

UKW EMPFINDLICHKEITEN

2TP1	60 µV (10,7 MHz) durch 0,1 µF, RG 75 Ohm.
2TP2	170 µV (10,7 MHz) durch 0,1 µF, RG 75 Ohm.
2TP3	600 µV (10,7 MHz) durch 0,1 µF, RG 75 Ohm.

NF EMPFINDLICHKEITEN

4TP100	2,5 mV
4TP200	2,5 mV
2TP100	135 mV
2TP200	135 mV
2TP101	150 mV
2TP201	150 mV
5TP100	500 mV
5TP200	500 mV

LEERLAUFSTROM

5TP101	10 mV
5TP201	10 mV oder:

25 mA im Kollektor von 5IC101, 5IC201.

COLOUR OF WIRES
KABELFARBEN
LEDNINGSFARVER

b	black	schwartz	sort
bl	blue	blau	blå
br	brown	braun	brun
gr	green	grün	grøn
grey	grey	grau	grå
or	orange	orange	orange
r	red	rot	rød
v	violet	violett	violet
wh	white	weiss	hvid
y	yellow	gelb	gul

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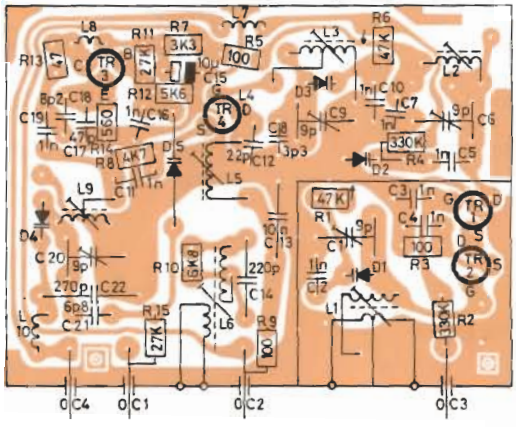
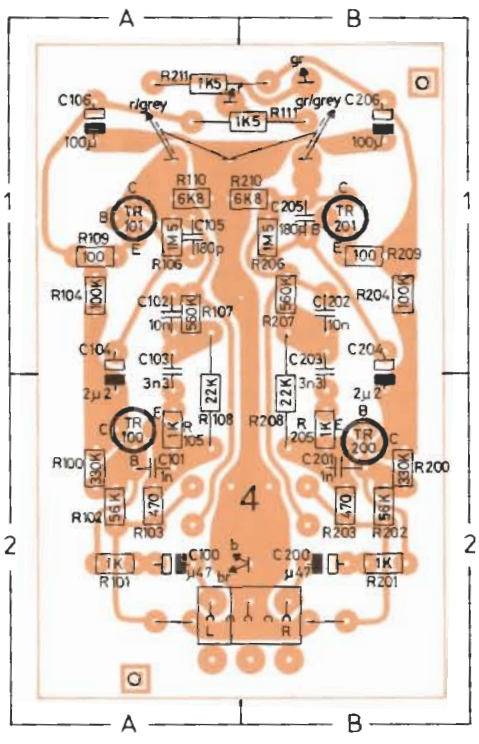
1 PC 8050054 FRONT END



4 PC 8002280 PHONO AMPLIFIER



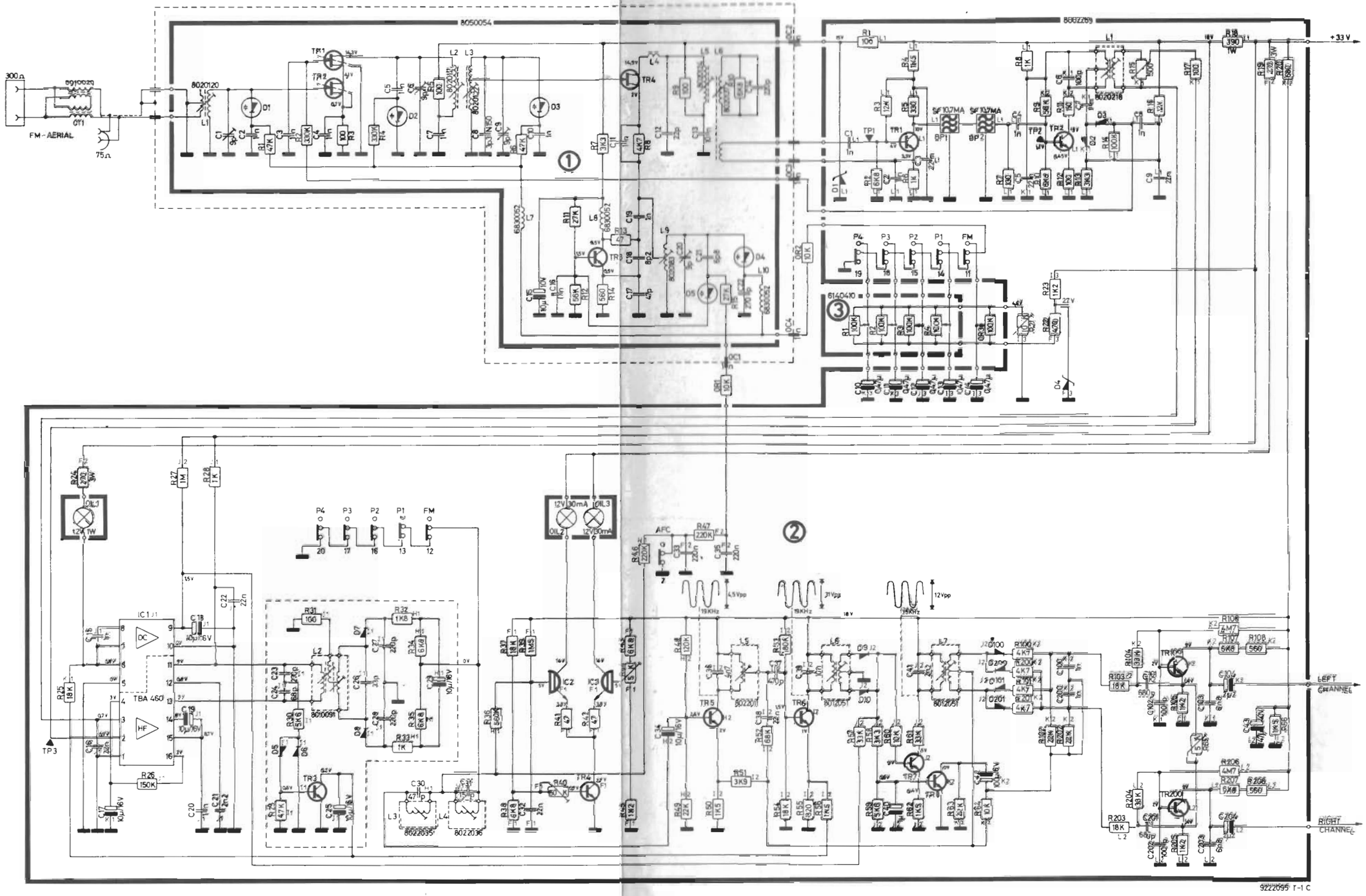
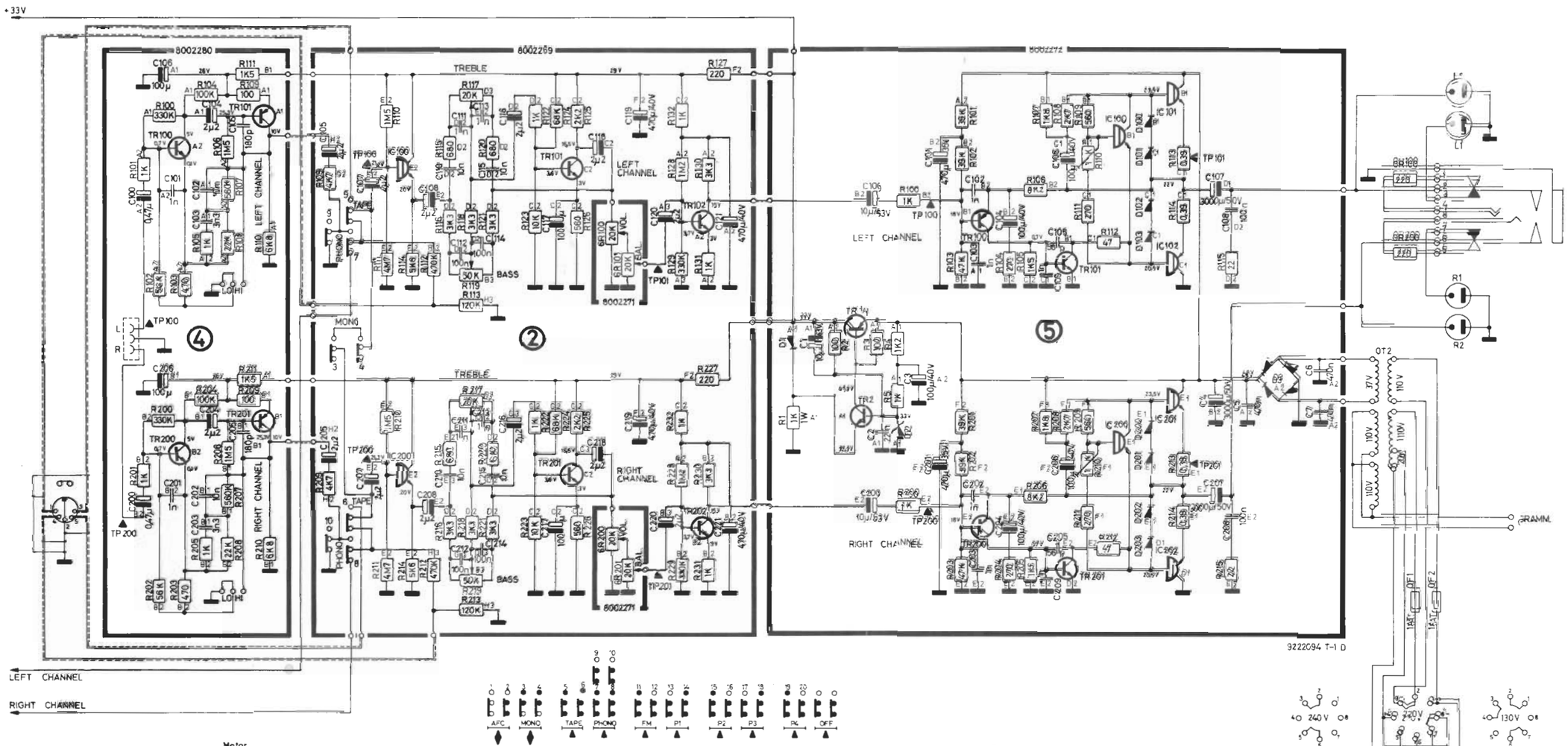
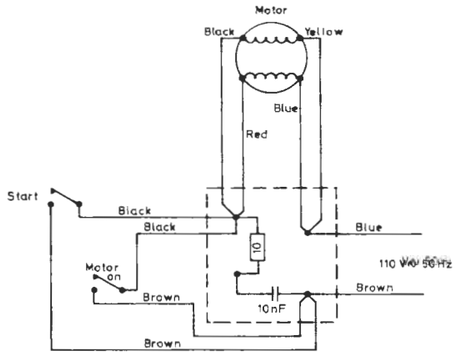
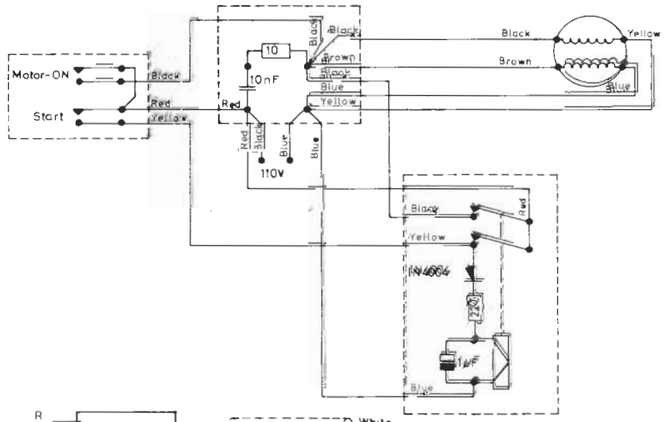
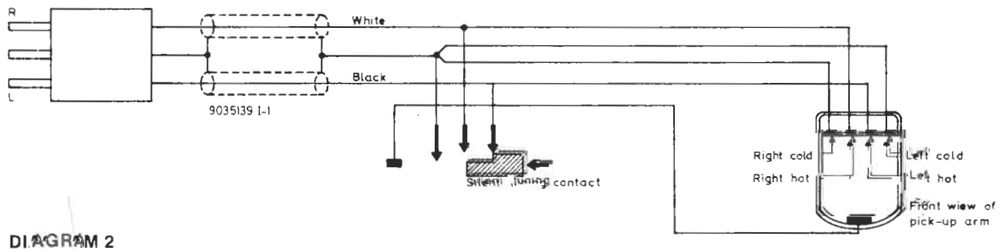

8050054
8022269
300Ω
5910020
FM-AERIAL
75Ω
8020120
TR1
TR2
TR3
TR4
D1
D2
D3
D4
D5
8020216
SF107MA
BP1
BP2
+33 V
P4
P3
P2
P1
FM
6140410
TP1
TP2
TP3
IC1
TBA 460
DC
HF
IC2
IC3
8022201
8022051
8022035
8022036
8020091
6830052
AFC
19KHz
4.5Vpp
21Vpp
12Vpp
LEFT CHANNEL
RIGHT CHANNEL
9222095 T-1 C

DIAGRAM 1


+33V
8002280
8002269
8002272
TREBLE
LEFT CHANNEL
BASS
TAPE
PHONO
MONO
TP100
TP101
TP200
TP201
TP266
RIGHT CHANNEL
LOUDNESS
VOL
BAL
LO HI
4
2
5
LEFT CHANNEL
RIGHT CHANNEL
9222094 T-1 D
OT2
37V
110V
220V
240V
130V
110V
RAMM
ON/OFF
AFC
MONO
TAPE
PHONO
FM
P1
P2
P3
P4
OFF


Motor
Black
Yellow
Blue
Red
Start
Black
Black
Blue
10
Motor on
Brown
10nF
Brown
Brown
110 V 60 Hz


Motor-ON
Start
Black
Red
10
10nF
Black
Brown
Black
Blue
Yellow
Red
Black
Blue
Blue
110V
Black
Brown
Blue
Yellow
Black
Red
1N4004
220
1µF
Blue


R
L
White
Black
9035139 I-1
Silent tuning contact
Right cold
Right hot
Left cold
Left hot
Front view of pick-up arm

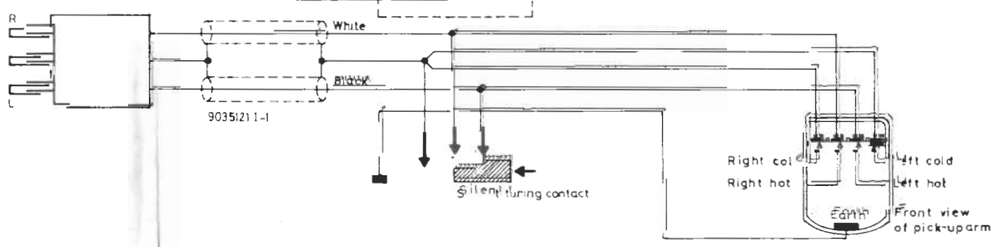
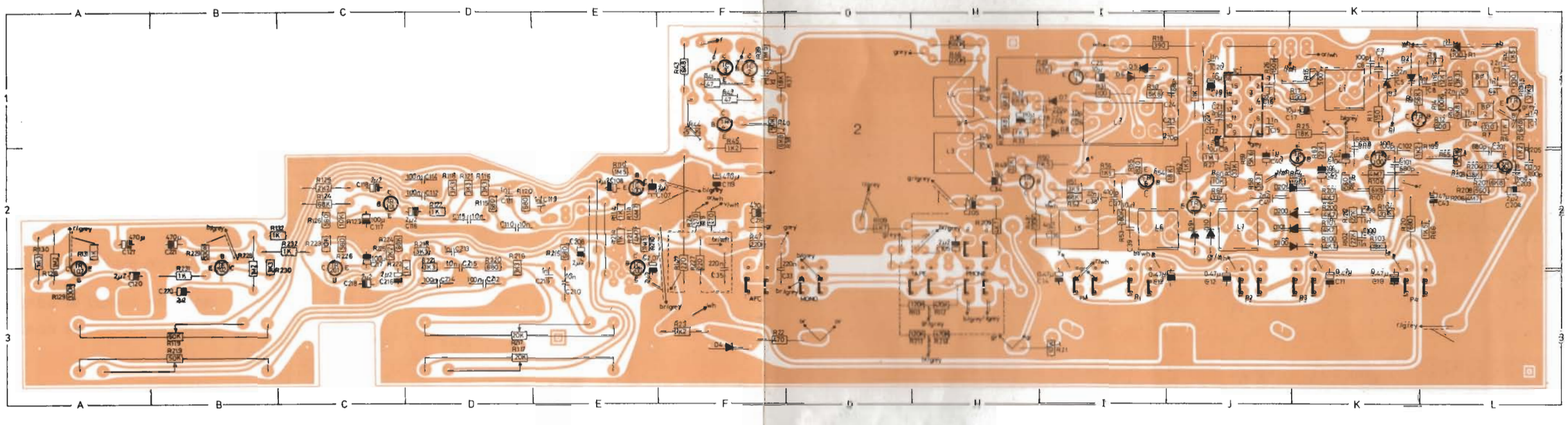
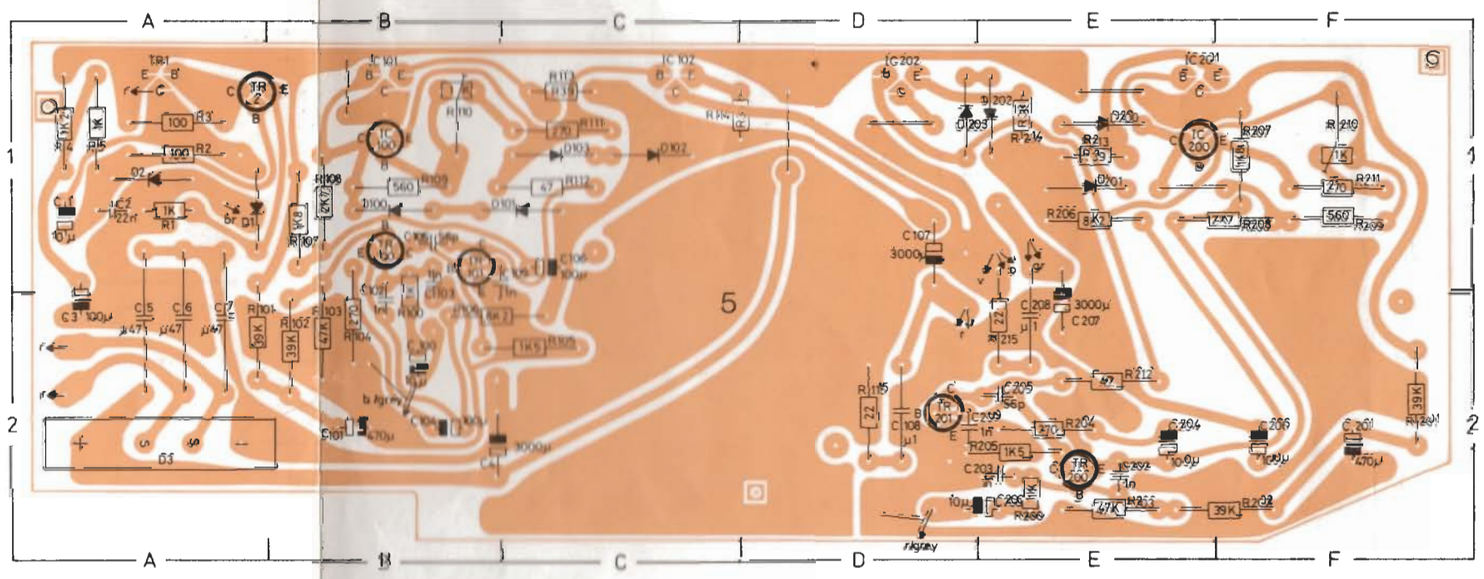

R
L
White
Black
9035121 I-1
Silent tuning contact
Right cold
Right hot
Left cold
Left hot
Front view of pick-up arm

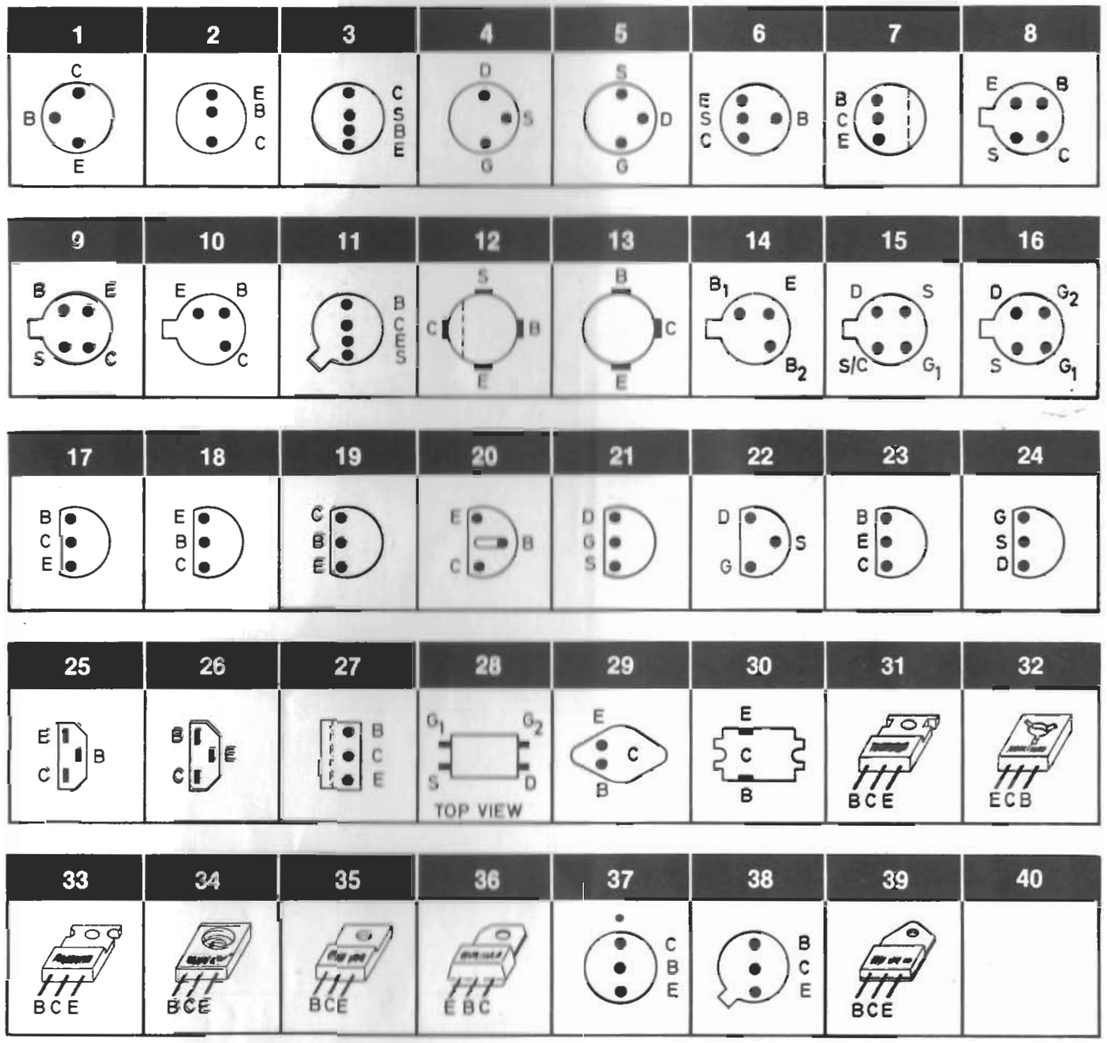
DIAGRAM 2

2 PC 8002269 IF SECTION, DECODER AND TONE AMPLIFIEF



5 PC 8002272 OUTPUT AMPLIFIER





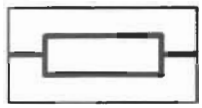
TRANSISTOR LIST

1TR1	8320119	4	U 1981 E	5TR1	8320269	32	BD 236 B
1TR2		21	2N 5245			32	BD 236
		21	TIS 88 A			32	BD 178
1TR3	8320112	26	BF 195	5TR2	8320295	20	BC 337 B
						20	BC 337-25
1TR4	8320136	4	U 1981 E				
		5	U 1897 E	5TR100/200	8320069	1	BC 154
		21	2N 5245			19	BC 322 B
		21	3 C 2			18	BC 309 B
		22	3 C 2 P			20	BC 214 B
		21	TIS 88 A			20	BC 549 B
						18	BC 253 B
2TR1	8320089	26	BF 194			17	BC 214 BL
2TR2						20	BC 214 BK
2TR3	8320097	20	BC 547 B	5TR101/201	8320097	20	BC 547 B
2TR4		18	BC 237 B			18	BC 237 B
		20	BC 171 B			20	BC 171 B
		19	BC 317 B			19	BC 317 B
		20	BC 182 B			20	BC 182 B
		17	BC 182 BL			17	BC 182 BL
		20	BC 182 BK			20	BC 182 BK
		20	BC 237 B			20	BC 237 B
		1	BC 207 B			1	BC 207 B
2TR5	8320095	20	BC 549 B	5IC100/200	8340028	19	MPS A13
		20	BC 239 B			19	SPS 5418
		20	BC 184 B				
		17	BC 184 BL	5IC101/201	8340027	34	BD 697
		20	BC 184 BK				
				5IC102/202	8340023	34	BD 698
2TR6	8320097	20	BC 547 B				
2TR7		18	BC 237 B				
2TR8		20	BC 171 B				
		19	BC 317 B				
		20	BC 182 B				
		17	BC 182 BL				
		20	BC 182 BK				
		20	BC 237 B				
		1	BC 207 B				
2TR100/200	8320138	20	BC 183 B				
		20	BC 183 BK				
		17	BC 183 BL				
2TR101/201	8320095	20	BC 549 B				
		20	BC 239 B				
		20	BC 184 B				
		17	BC 184 BL				
		20	BC 184 BK				
2TR102/202	8320097	20	BC 547 B				
		18	BC 237 B				
		20	BC 171 B				
		19	BC 317 B				
		20	BC 182 B				
		17	BC 182 BL				
		20	BC 182 BK				
		20	BC 237 B				
		1	BC 207 B				
2IC2	8340054	19	MPS A13				
2IC3							
2IC100/200	8340028	19	MPS A13				
		19	SPS 5418				
4TR100/200	8320095	20	BC 549 B				
		20	BC 239 B				
		20	BC 184 B				
		17	BC 184 BL				
		20	BC 184 BK				
4TR101/201	8320069	1	BC 154				
		19	BC 322 B				
		18	BC 309 B				
		20	BC 214 B				
		20	BC 549 B				
		18	BC 253 B				
		17	BC 214 BL				
		20	BC 214 BK				

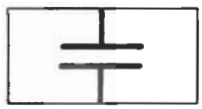
DIODE AND IC LIST

1D1	8300050	BB 103 blue	5D1	8300023	EM 502 1N 4002 1N 4003
1D2-1D3	8300041	BB 105 green			
1D4	8300050	BB 103 blue	5D2	8300199	33V 1W
1D5	8300032	BA 138	5D3	8310020	B 80 C 3200/ 2200
2D1	8300053	ZPD 15V BZX 79 15V	5D100- 5D203	8300131	1N 4148
2D2-2D3	8300131	1N 4148			
2D4	8340081	25,7 - 28,3V	2IC1	8340014	TBA 460
2D5-2D10	8300024	AA 119			
2D100- 2D201	8300131	1 N 4148			

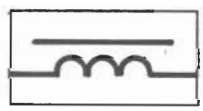
1 PC 8050054 FRONT END



R1	5001050	47 KOhm 10% 1/2W
R2	5001062	330 KOhm 10% 1/2W
R3	5001013	100 Ohm 10% 1/2W
R4	5001062	330 KOhm 10% 1/2W
R5	5001013	100 Ohm 10% 1/2W
R6	5001050	47 KOhm 10% 1/2W
R7	5010076	3,3 KOhm 5% 1/8W
R8	5001038	4,7 KOhm 10% 1/2W
R9	5001013	100 Ohm 10% 1/2W
R10	5001040	6,8 KOhm 10% 1/2W
R11	5010141	27 KOhm 5% 1/8W
R12	5010041	5,6 KOhm 5% 1/8W
R13	5010411	47 Ohm 5% 1/8W
R14	5010067	560 Ohm 5% 1/8W
R15	5001047	27 KOhm 10% 1/2W



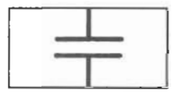
C1	4330001	1 - 9 pF Cer.
C2	4010008	1 nF —20 +% 400V
C3	4010008	1 nF —20 +50% 400V
C4	4010008	1 nF —20 +50% 400V
C5	4010008	1nF —20 +50% 400V
C6	4330001	1 - 9pF Cer.
C7	4010008	1 nF —20 +50% 400V
C8	4003012	3,3 pF 0,25 pF 400V
C9	4330001	1 - 9 pF Cer.
C10	4010008	1 nF —20 +50% 400V
C11	4010008	1 nF —20 +50% 400V
C12	4003059	22 pF 5% 250V
C13	4130081	10 nF 20% 250V
C14	4101007	220 pF 5% 63V
C15	4200107	10 uF 10V
C16	4010008	1 nF —20 +50% 400V
C17	4003130	47 pF 2% 63V
C18	4000015	8,2 pF 0,25 pF 63V
C19	4010008	1 nF —20 +50% 400V
C20	4330001	1 - 9 pF Cer.
C21	4005004	6,8 pF 0,5 pF 100V
C22	4101031	270 pF 5% 63V
0C1	4010018	1 nF 250V
0C2	4010018	1 nF 250V
0C3	4010018	1 nF 250V
0C4	4010018	1 nF 250V



L1	8020120	
L2	8020121	
L3	8020122	
L4	6710001	
L5	8020124	10,7 MHz
L6	8020137	10,7 MHz
L7	6830052	3,8 uH 5%
L8	6830052	3,8 uH 5%
L9	8020183	Osc.
L10	6830052	3,8 uH 5%
	6702008	Ferritcore red
	6702001	Ferritcore white
	6479001	Glassbushing
0T1	8010020	300/75 Ohm

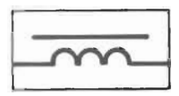
2 PC 8002269 IF SECTION, DECODER AND TONE AMPLIFIER

R1	5001013	100 Ohm 10% 1/2W	R100	5010048	4,7 KOhm 5% 1/8W
R2	5010052	6,8 KOhm 5% 1/8W	R101	5010048	4,7 KOhm 5% 1/8W
R3	5010046	12 KOhm 5% 1/8W	R102	5010079	22 KOhm 5% 1/8W
R4	5001032	1,5 KOhm 10% 1/2W	R103	5010135	18 KOhm 5% 1/8W
R5	5010044	330 Ohm 5% 1/8W	R104	5010075	33 KOhm 5% 1/8W
R6	5010040	1 KOhm 5% 1/8W	R105	5010153	1,2 KOhm 5% 1/8W
R7	5010044	330 Ohm 5% 1/8W	R106	5011078	4,7 MOhm 10% 1/4W
R8	5001029	1 KOhm 10% 1/2W	R107	5010052	6,8 KOhm 5% 1/8W
R9	5010061	56 KOhm 5% 1/8W	R108	5010067	560 Ohm 5% 1/8W
R10	5010052	6,8 KOhm 5% 1/8W	R109	5010048	4,7 KOhm 5% 1/8W
R11	5010057	150 Ohm 5% 1/8W	R110	5011071	1,5 MOhm 10% 1/4W
R12	5010065	100 Ohm 5% 1/8W	R111	5011078	4,7 MOhm 10% 1/4W
R13	5001036	3,3 KOhm 10% 1/2W	R112	5010077	470 KOhm 5% 1/8W
R14	5001055	100 Kohm 10% 1/8W	R113	5010047	120 KOhm 5% 1/8W
R15	5370150	500 Ohm 20% LIN.	R114	5011041	5,6 KOhm 5% 1/4W
R16	5001043	12 KOhm 10% 1/2W	R115	5010144	680 Ohm 5% 1/8W
R17	5001013	100 Ohm 10% 1/2W	R116	5010076	3,3 KOhm 5% 1/8W
R18	5002020	390 Ohm 10% 1W	R117	5310037	2 x 20 KOhm LIN.
R19	5100119	270 Ohm 5% 3W	R118	5010076	3,3 KOhm 5% 1/8W
R20	5001026	680 Ohm 10% 1/2W	R119	5310039	2 x 50 KOhm LIN.
R21	5370074	10 KOhm 20% LIN:	R120	5010144	680 Ohm 5% 1/8W
R22	5010058	470 Ohm 5% 1/8W	R121	5010076	3,3 KOhm 5% 1/8W
R23	5001030	1,2 KOhm 10% 1/2W	R122	5010040	1 KOhm 5% 1/8W
R24	5100119	270 Ohm 5% 3W	R123	5010059	10 KOhm 5% 1/8W
R25	5001045	18 KOhm 10% 1/2W	R124	5010062	68 KOhm 5% 1/8W
R26	5001057	150 KOhm 10% 1/2W	R125	5010064	2,2 KOhm 5% 1/8W
R27	5001069	1 MOhm 10% 1/2W	R126	5010067	560 Ohm 5% 1/8W
R28	5001029	1 KOhm 10% 1/2W	R127	5001019	220 Ohm 10% 1/2W
R29	5001050	47 KOhm 10% 1/2W	R128	5010421	1,2 MOhm 10% 1/4W
R30	5001039	5,6 KOhm 10% 1/2W	R129	5010117	330 KOhm 5% 1/8W
R31	5001013	100 Ohm 10% 1/2W	R130	5010076	3,3 KOhm 5% 1/8W
R32	5010066	1,8 KOhm 5% 1/8W	R131	5010040	1 KOhm 5% 1/8W
R33	5010040	1 KOhm 5% 1/8W	R132	5001029	1 KOhm 10% 1/2W
R34	5010052	6,8 KOhm 5% 1/8W	R200	5010048	4,7 KOhm 5% 1/8W
R35	5010052	6,8 KOhm 5% 1/8W	R201	5010048	4,7 KOhm 5% 1/8W
R36	5001066	560 KOhm 10% 1/2W	R202	5010079	22 KOhm 5% 1/8W
R37	5001045	18 KOhm 10% 1/2W	R203	5010135	18 KOhm 5% 1/8W
R38	5001040	6,8 KOhm 10% 1/2W	R204	5010075	33 KOhm 5% 1/8W
R39	5001071	1,5 MOhm 10% 1/2W	R205	5010153	1,2 KOhm 5% 1/8W
R40	5370061	50 KOhm 20% LIN.	R206	5011078	4,7 MOhm 10% 1/4W
R41	5001008	47 Ohm 10% 1/2W	R207	5010052	6,8 KOhm 5% 1/8W
R42	5001008	47 Ohm 10% 1/2W	R208	5010067	560 Ohm 5% 1/8W
R43	5001040	6,8 KOhm 10% 1/2W	R209	5010048	4,7 KOhm 5% 1/8W
R44	5370058	5 KOhm 20% LIN.	R210	5011071	1,5 MOhm 10% 1/4W
R45	5001030	1,2 KOhm 10% 1/2W	R211	5011078	4,7 MOhm 10% 1/4W
R46	5001059	220 KOhm 10% 1/2W	R212	5010077	470 KOhm 5% 1/8W
R47	5001059	220 Kohm 10% 1/2W	R213	5010047	120 KOhm 5% 1/8W
R48	5010047	120 KOhm 5% 1/8W	R214	5011041	5,6 KOhm 5% 1/4W
R49	5010079	22 KOhm 5% 1/8W	R215	5010144	680 Ohm 5% 1/8W
R50	5001032	1,5 KOhm 10% 1/2W	R216	5010076	3,3 KOhm 5% 1/8W
R51	5010069	3,9 KOhm 5% 1/8W	R217	5310037	2 x 20 KOhm LIN.
R52	5010062	68 KOhm 5% 1/8W	R218	5010076	3,3 KOhm 5% 1/8W
R53	5001058	180 KOhm 10% 1/2W	R219	5310039	2 x 50 KOhm LIN.
R54	5001045	18 KOhm 10% 1/2W	R220	5010144	680 Ohm 5% 1/8W
R55	5001027	820 Ohm 10% 1/2W	R221	5010076	3,3 KOhm 5% 1/8W
R56	5001032	1,5 KOhm 10% 1/2W	R222	5010040	1 KOhm 5% 1/8W
R57	5001048	33 KOhm 10% 1/2W	R223	5010059	10 KOhm 5% 1/8W
R58	5001036	3,3 KOhm 10% 1/2W	R224	5010062	68 KOhm 5% 1/8W
R59	5001039	5,6 KOhm 10% 1/2W	R225	5010064	2,2 KOhm 5% 1/8W
R60	5001042	10 KOhm 10% 1/2W	R226	5010067	560 Ohm 5% 1/8W
R61	5001048	33 KOhm 10% 1/2W	R227	5001019	220 Ohm 10% 1/2W
R62	5001032	1,5 KOhm 10% 1/2W	R228	5010421	1,2 MOhm 10% 1/4W
R63	5010079	22 KOhm 5% 1/8W	R229	5010117	330 KOhm 5% 1/8W
R64	5010059	10 KOhm 5% 1/8W	R230	5010076	3,3 KOhm 5% 1/8W
R65	5370058	5 KOhm 20% LIN.	R231	5010040	1 KOhm 5% 1/8W
R66	5001032	1,5 KOhm 10% 1/2W	R232	5001029	1 KOhm 10% 1/2W



C1	4010008	1 nF —20 +50% 400V	C21	4010061	2,2 nF 10% 63V
C2	4010008	1 nF —20 +50% 400V	C22	4010060	22 nF —20 +100% 40V
C3	4010060	22 nF —20 +100% 40V	C23	4000071	270 pF 5% 63V
C4	4010008	1 nF —20 +50% 400V	C24	4000019	68 pF 5% 63V
C5	4010060	22 nF —20 +100% 40V	C25	4200101	10 uF 16V
C6	4101002	100 pF 5% 63V	C26	4003125	33 pF 2% 63V
C7	4010008	1 nF —20 +50% 400V	C27	4010021	220 pF 10% 100V
C8	4010008	1 nF —20 +50% 400V	C28	4010021	220 pF 10% 100V
C9	4010060	22 nF —20 +100% 40V	C29	4200101	10 uF 16V
C10	4201058	0,47 uF 35V	C30	4003130	47 pF 2% 63V
C11	4201058	0,47 uF 35V	C31	4000049	15 pF 2% 63V
C12	4201058	0,47 uF 35V	C32	4010060	22 nF —20 +100% 40V
C13	4201058	0,47 uF 35V	C33	4130104	220 nF 20% 100V
C14	4201058	0,47 uF 35V	C34	4200101	10 uF 16V
C15	4010008	1 nF —20 +50% 400V	C35	4130104	220 nF 20% 100V
C16	4010060	22 nF —20 +100% 40V	C36	4101026	4,7 nF 5% 63V
C17	4200101	10 uF 16V	C37	4101018	470 pF 5% 63V
C18	4200101	10 uF 16V	C38	4010060	22 nF —20 +100% 40V
C19	4200101	10 uF 16V	C39	4100026	10 nF 5% 63V
C20	4010008	1 nF —20 +50% 400V	C40	4201057	1 uF 35V

C41	4101010	2,2 nF 10% 63V	C200	4010027	1 nF 10% 100V
C42	4200098	100 uF 6V	C201	4101004	680 pF 5% 63V
C43	4201074	47 uF 40V	C202	4101002	100 pF 5% 63V
C100	4010027	1 nF 10% 100V	C203	4100025	6,8 nF 5% 63V
C101	4101004	680 pF 5% 63V	C204	4201069	2,2 uF 35V
C102	4101002	100 pF 5% 63V	C205	4201069	2,2 uF 35V
C103	4100025	6,8 nF 5% 63V	C207	4201069	2,2 uF 35V
C104	4201069	2,2 uF 35V	C208	4201069	2,2 uF 35V
C105	4201069	2,2 uF 35V	C210	4130109	10 nF 10% 250V
C107	4201069	2,2 uF 35V	C211	4010027	1 nF 10% 100V
C108	4201069	2,2 uF 35V	C212	4130107	100 nF 10% 250V
C110	4130109	10 nF 10% 250V	C213	4010027	1 nF 10% 100V
C111	4010027	1 nF 10% 100V	C214	4130107	100 nF 10% 250V
C112	4130107	100 nF 10% 250V	C215	4130109	10 nF 10% 250V
C113	4010027	1 nF 10% 100V	C216	4201069	2,2 uF 35V
C114	4130107	100 nF 10% 250V	C217	4200098	100 uF 6V
C115	4130109	10 nF 10% 250V	C218	4201069	2,2 uF 35V
C116	4201069	2,2 uF 35V	C219	4200275	470 uF 40V
C117	4200098	100 uF 6V	C220	4201069	2,2 uF 35V
C118	4201069	2,2 uF 35V	C221	4200275	470 uF 40V
C119	4200275	470 uF 40V			
C120	4201069	2,2 uF 35V			
C121	4200275	470 uF 40V			

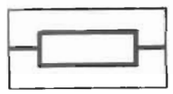


L1	8020218	10,7 MHz
L2	8010091	Det.
L3	8022035	114 kHz
L4	8022036	152 kHz
L5	8022011	19 kHz
L6	8012051	38 kHz
L7	8012051	38 kHz

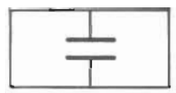
3302221	Screen, bottom, det.
3304044	Screen, housing, det.
3302244	Screen, decoder

BP1	8030001	10,7 MHz
BP2	8030001	10,7 MHz

4 PC 8002280 PHONO AMPLIFIER



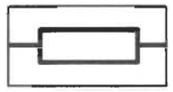
R100	5011063	330 KOhm 5% 1/4W	R200	5011063	330 KOhm 5% 1/4W
R101	5010040	1 KOhm 5% 1/8W	R201	5010040	1 KOhm 5% 1/8W
R102	5010061	56 KOhm 5% 1/8W	R202	5010061	56 KOhm 5% 1/8W
R103	5010058	470 Ohm 5% 1/8W	R203	5010058	470 Ohm 5% 1/8W
R104	5010049	100 KOhm 5% 1/8W	R204	5010049	100 KOhm 5% 1/8W
R105	5010040	1 KOhm 5% 1/8W	R205	5010040	1 KOhm 5% 1/8W
R106	5011071	1,5 Mohm 10% 1/4W	R206	5011071	1,5 MOhm 10% 1/4W
R107	5010071	560 KOhm 5% 1/8W	R207	5010071	560 KOhm 5% 1/8W
R108	5010079	22 KOhm 5% 1/8W	R208	5010079	22 KOhm 5% 1/8W
R109	5010065	100 Ohm 5% 1/8W	R209	5010065	100 Ohm 5% 1/8W
R110	5010052	6,8 KOhm 5% 1/8W	R210	5010052	6,8 KOhm 5% 1/8W
R111	5001032	1,5 KOhm 10% 1/2W	R211	5001032	1,5 KOhm 10% 1/2W



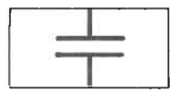
C100	4201058	0,47 uF 35V	C200	4201058	0,47 uF 35V
C101	4010008	1 nF —20 +50% 400V	C201	4010008	1 nF —20 +50% 400V
C102	4010041	10 nF —20 +100% 40V	C202	4010041	10 nF —20 +100% 40V
C103	4011025	3,3 nF 10% 100V	C203	4011025	3,3 nF 10% 100V
C104	4200296	2,2 uF 35V	C204	4201069	2,2 uF 35V
C105	4010029	180 pF 10% 100V	C205	4010029	180 pF 10% 100V
C106	4201060	100 uF 35V	C206	4201060	100 uF 35V

7210039	Socket
3034022	Code lock

5 PC 8002272 OUTPUT AMPLIFIER



R1	5002024	1 KOhm 10% 1W
R2	5001013	100 Ohm 10% 1/2W
R3	5001013	100 Ohm 10% 1/2W
R4	5001030	1,2 KOhm 10% 1/2W
R5	5001029	1 KOhm 10% 1/2W
R100	5010040	1 KOhm 5% 1/8W
R101	5010060	39 KOhm 5% 1/8W
R102	5010060	39 KOhm 5% 1/8W
R103	5010045	47 KOhm 5% 1/8W
R104	5010000	270 Ohm 5% 1/8W
R105	5001032	1,5 KOhm 10% 1/2W
R106	5010154	8,2 KOhm 5% 1/8W
R107	5001033	1,8 KOhm 5% 1/2W
R108	5001035	2,7 KOhm 10% 1/2W
R109	5001025	560 Ohm 10% 1/2W
R110	5370050	1 KOhm 20% LIN.
R111	5001020	270 Ohm 10% 1/2W
R112	5001008	47 Ohm 10% 1/2W
R113	5110017	0,39 KOhm 10% 1,5W
R114	5102007	0,39 Ohm 10% 1W
R115	5001004	22 Ohm 10% 1/2W
R200	5010040	1 KOhm 5% 1/8W
R201	5010060	39 KOhm 5% 1/8W
R202	5010060	39 KOhm 5% 1/8W
R203	5010045	47 KOhm 5% 1/8W
R204	5010000	270 Ohm 5% 1/8W
R205	5001032	1,5 KOhm 10% 1/2W
R206	5010154	8,2 KOhm 5% 1/8W
R207	5001033	1,8 KOhm 5% 1/1W
R208	5001035	2,7 KOhm 10% 1/2W
R209	5001025	560 Ohm 10% 1/2W
R210	5370050	1 KOhm 20% LIN.
R211	5001020	270 Ohm 10% 1/2W
R212	5001008	47 Ohm 10% 1/2W
R213	5110017	0,39 KOhm 10% 1,5W
R214	5102007	0,39 Ohm 10% 1W
R215	5001004	22 Ohm 10% 1/2W

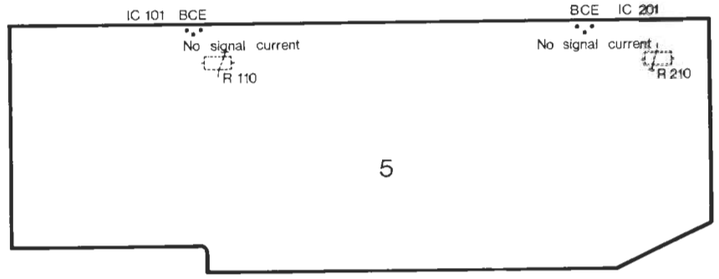


C1	4201065	10 uF 63V
C2	4010060	22 nF −20 +100% 40V
C3	4201060	100 uF 35V
C4	4200263	3000 uF 50V
C5	4130029	470 nF 10% 250V
C6	4130029	470 nF 10% 250V
C7	4130029	470 nF 10% 250V
C100	4201065	10 uF 63V
C101	4200275	470 uF 40V
C102	4010008	1 nF −20 +50% 400V
C103	4010008	1 nF −20 +50% 400V
C104	4201060	100 uF 35V
C105	4003124	56 pF 2% 63V
C106	4201060	100 uF 35V
C107	4200263	3000 uF 50V
C108	4130075	100 nF 20% 250V
C109	4010008	1 nF −20 +50% 400V
C200	4201065	10 uF 63V
C201	4200275	470 uF 40V
C202	4010008	1 nF −20 +50% 400V
C203	4010008	1 nF −20 +50% 400V
C204	4201060	100 uF 35V
C205	4003124	56 pF 2% 63V
C206	4201060	100 uF 35V
C207	4200263	3000 uF 50V
C208	4130075	100 nF 20% 250V
C209	4010008	1 nF −20 +50% 400V

ELECTRICAL ADJUSTMENTS

NO-SIGNAL CURRENT

No-signal current is adjusted with the receiver cold and the volume control turned down.
With 5R110 (5R210) adjust for a collector current of 25 mA in 5IC101 (5IC201) or for 10 mV across 5R113 (5R213). After the receiver has had power applied to it for 10 minutes with the volume control turned down, check the no-signal current and again adjust to 25 mA, or to 10 mV across the emitter resistor.

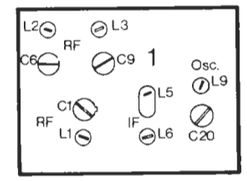


TUNING VOLTAGE

Depress FM button. Bring the FM tuning control all the way to the left, against the stop.
With 2R21 adjust for 4.6 V as measured at 0R1 on the tuner side relative to chassis.

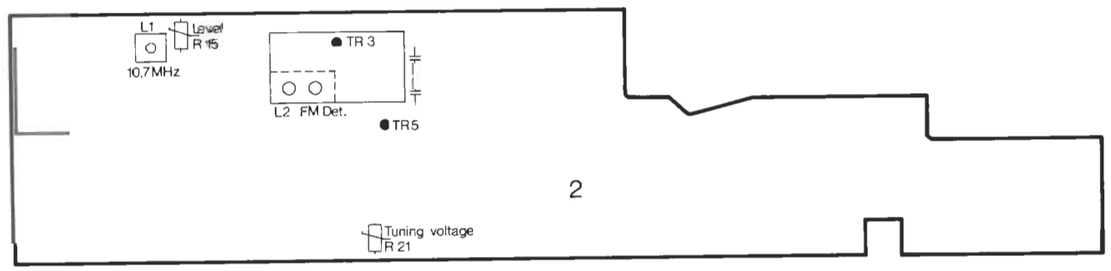
FM TUNER AND IF AMPLIFIER

Alignment is performed with 2R15 set at 1/4 of mechanical maximum, clockwise. Connect sweep generator to aerial input and set it to 89 Mhz, $\Delta f = 0.5$ MHz, approx. 50 µV.
Connect oscilloscope to base of 2TR3.
Set tuning control to 89 MHz and disable the AFC circuit.
With 1L9, L1, L2, L3, L5, L6 and 2L1, 2L2 adjust for max. symmetrical curve on oscilloscope.
Set sweep generator to 102 MHz.
Set tuning control to 102 MHz.
With 1C20, C1, C6 and C9 adjust for max. symmetrical curve.
Check dial aligment at 89 MHz and repeat adjustment if necessary.



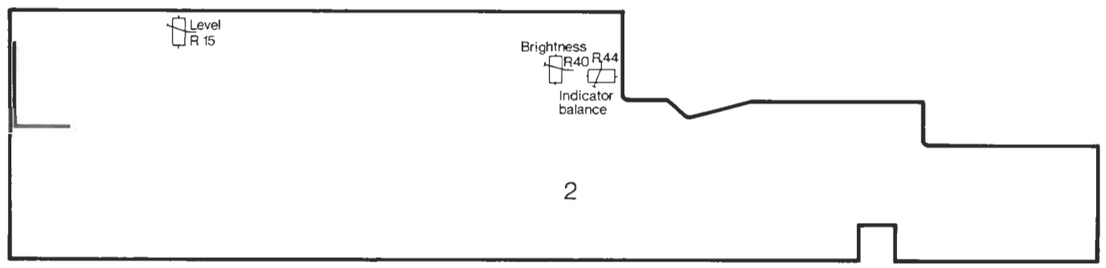
DETECTOR

Set 2R15 to mechanical maximum, clockwise.
Connect DC voltmeter to junction of 2C30 and C31.
Depress FM button.
Set tuning control so that no signal is being received.
Tune detector secondary for 0-V reading on DC voltmeter (± 50 mV).



INDIKATOR LIGHT

Depress FM button.
Set tuning control so that no signal is being received.
Adjust 2R44 so that balance lights have equal brilliance.
Adjust 2R40 so that the two lamps glow weakly.



SENSITIVITY

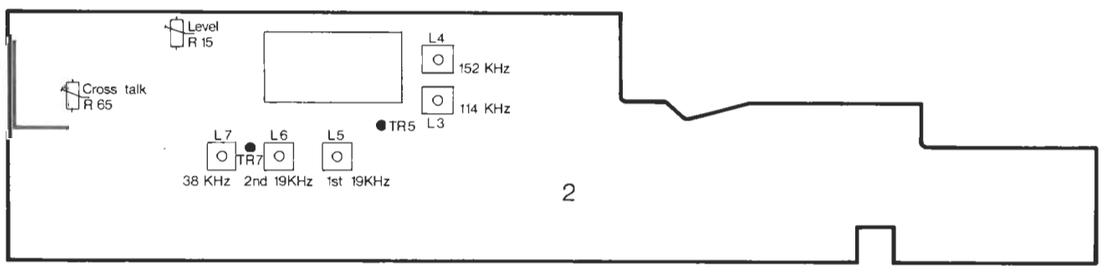
Depress FM button. Disable AFC.
Connect signal generator to aerial input and set it to 94 MHz, 1 mV, f.mod. = 1 kHz, Δ f = 40 kHz.
Connect vacumm-tube voltmeter to tape-recorder output.
Set receiver to signal-generator frequency.
Read output voltage on AC voltmeter.
Reduce signal-generator output level to 5 µV EMF and adjust 2R15 so that output voltage is down 3 dB relative to first reading.

STEREO DECODER, 19 AND 38 KHZ CIRCUITS

Depress FM button.
Connect stereo decoder to aerial input, f.mod. = 1 kHz, Δ f = 40 kHz, pilot 8 - 10%.
Connect oscilloscope to 2R62 (collector of 2TR7, via 100-kohm resistor).
Set 2R65 to max. resistance value.
Set tuning control to stereo-decoder aerial frequency.
With coils 2L5, L6 and L7 adjust for max. 38 kHz on oscilloscope.

CHANNEL SEPARATION

Set stereo decoder to modulate in left channel.
Connect AC vacuum-tube voltmeter to right tape-recorder output.
With 2L6 and 2R65 adjust for min. output voltage in right channel.
Connect stereo decoder to aerial input.



ALTERNATIVE ADJUSTMENT OF STEREO DECODER

Connect oscilloscope X-input to 10 kHz at collector of 2TR5.
Connect Y-input to 38 kHz at 2R61 (collector of 2TR7).
Adjust 2L5 for max. X-gain.
Adjust 2L6 for max. Y-gain.
Adjust 2L7 for symmetrical Lissajous figure.

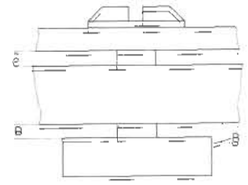
CHANNEL SEPARATION

With modulation in left channel adjust 2R65 for min. output voltage at right tape-recorder output.

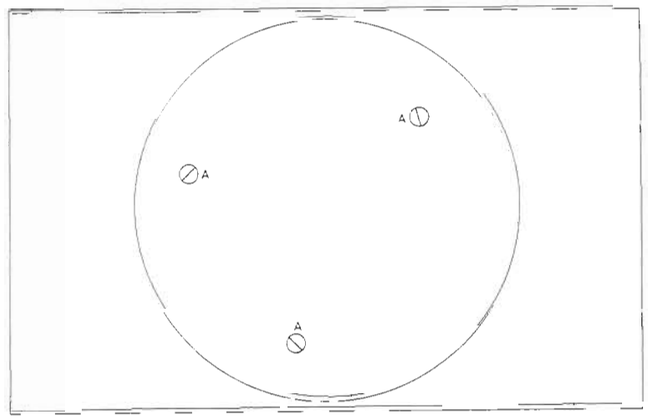
MECHANICAL ADJUSTMENTS

CHASSIS, HEIGHT

Put the turntable and two LP records (approx. 900 gr) on the turntable. The chassis should then come loose from all three transit bushings (B). The turntable should likewise be parallel with the chassis deck. After removal of the two LP records from the turntable, distances C and D should be identical.

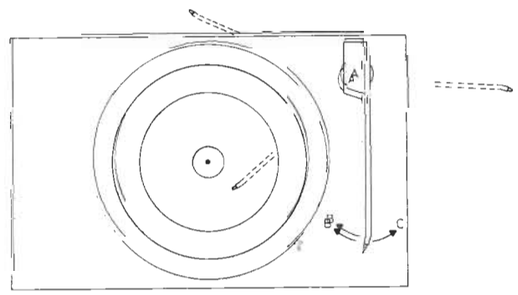


Adjustment may be made with screws A.



PICK-UP ARM, HEIGHT

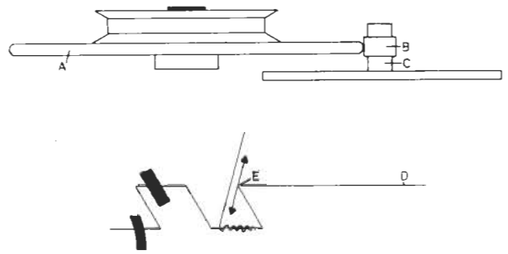
Put a record on the turntable. First turn the pickup arm in the direction of the arrow B until it reaches its end position. Then turn the pickup arm in the direction of the arrow C until the end position is reached.
Thereafter position the pickup arm above the first groove of the record.



Adjust screw A until the separation between the stylus and the record is 2 mm. See sketch.

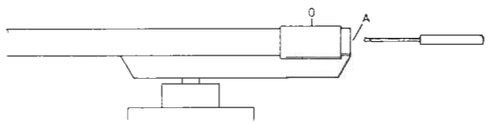
SPEED SELECTOR

At the speed selector, idler wheel A should shift on the stepped pulley from the point B at 45 rpm, to the point B at 33 rpm. Adjustment may be made by bending arm D at point E in the direction of the arrow.



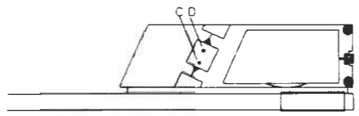
PICK-UP ARM, BALANCE

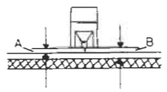
Set the slide controlling the stylus force adjustment to 0.
Adjust screw A until the pickup arm is exactly in balance.
Thereafter adjust the stylus force to 1.2 gr.



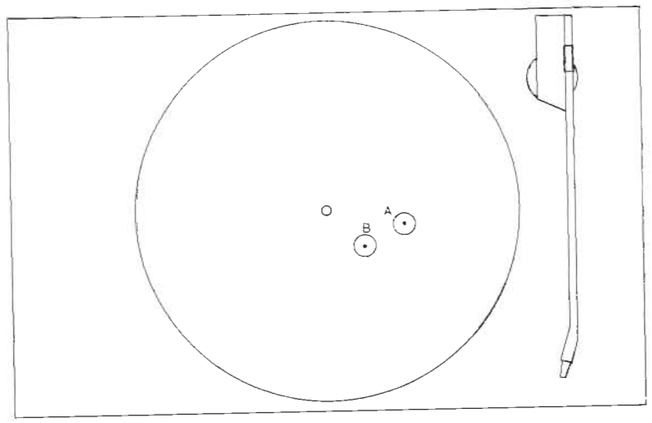
PICK-UP ARM, PARALLELISM

With Unbrako (hex wrench) screws C and D adjust until spacings A and B are identical and the plane part of the pickup is parallel with the top side of the deck.
Unbrako key 0.88 mm M 08.

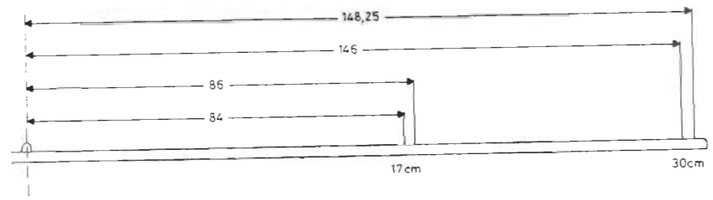


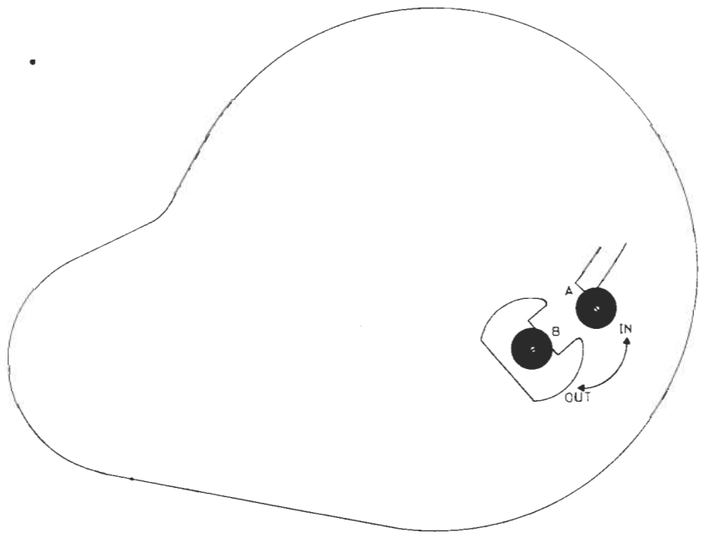


PICK-UP ARM, LANDING



With the record selector in the 17 position, adjust eccentric A so that the pickup when under automatic control is lowered inside the field marked "17 cm" in the sketch. Adjust eccentric B so that the pickup lowers into the field marked "30 cm" with the record selector at 30.

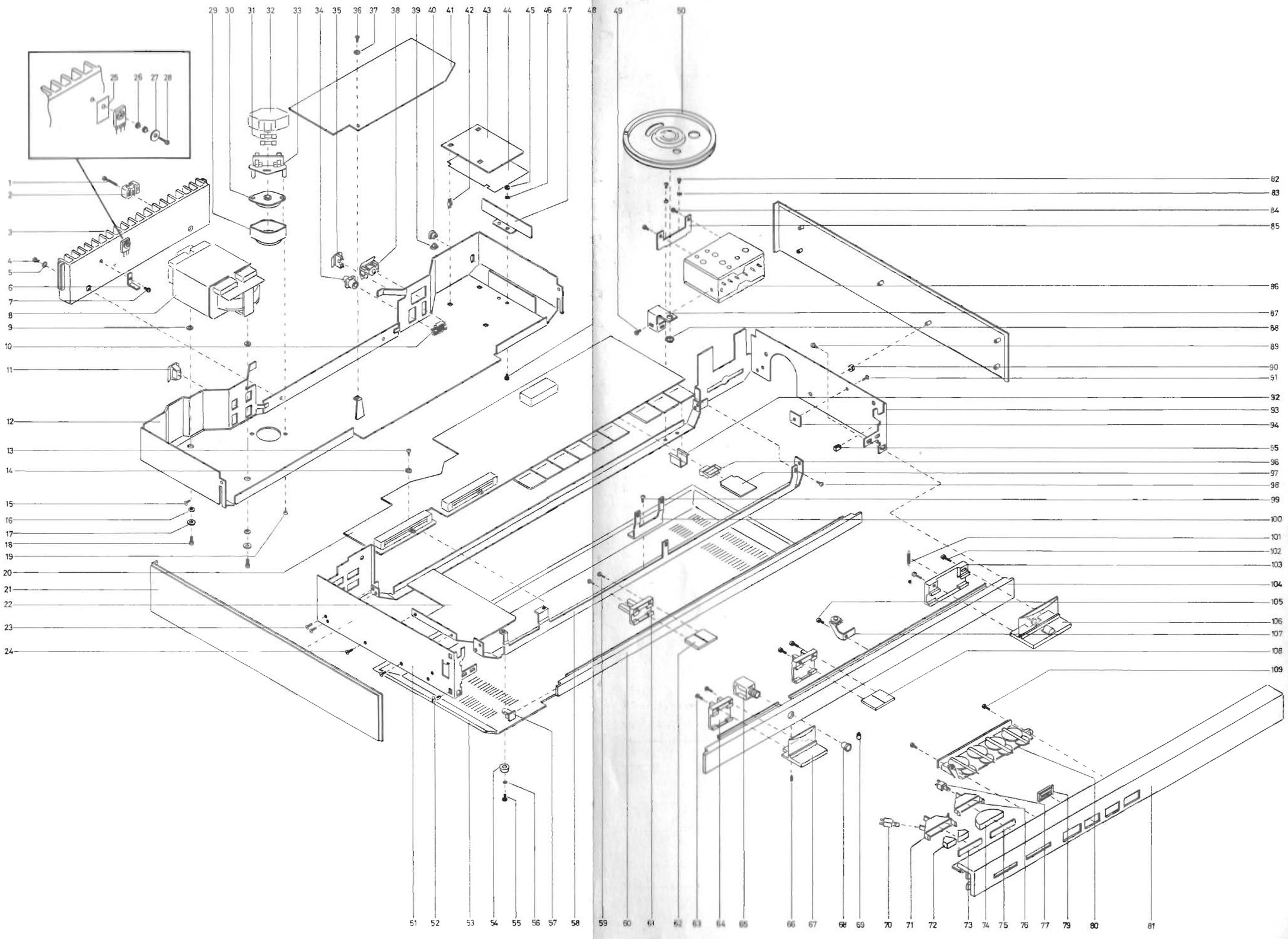


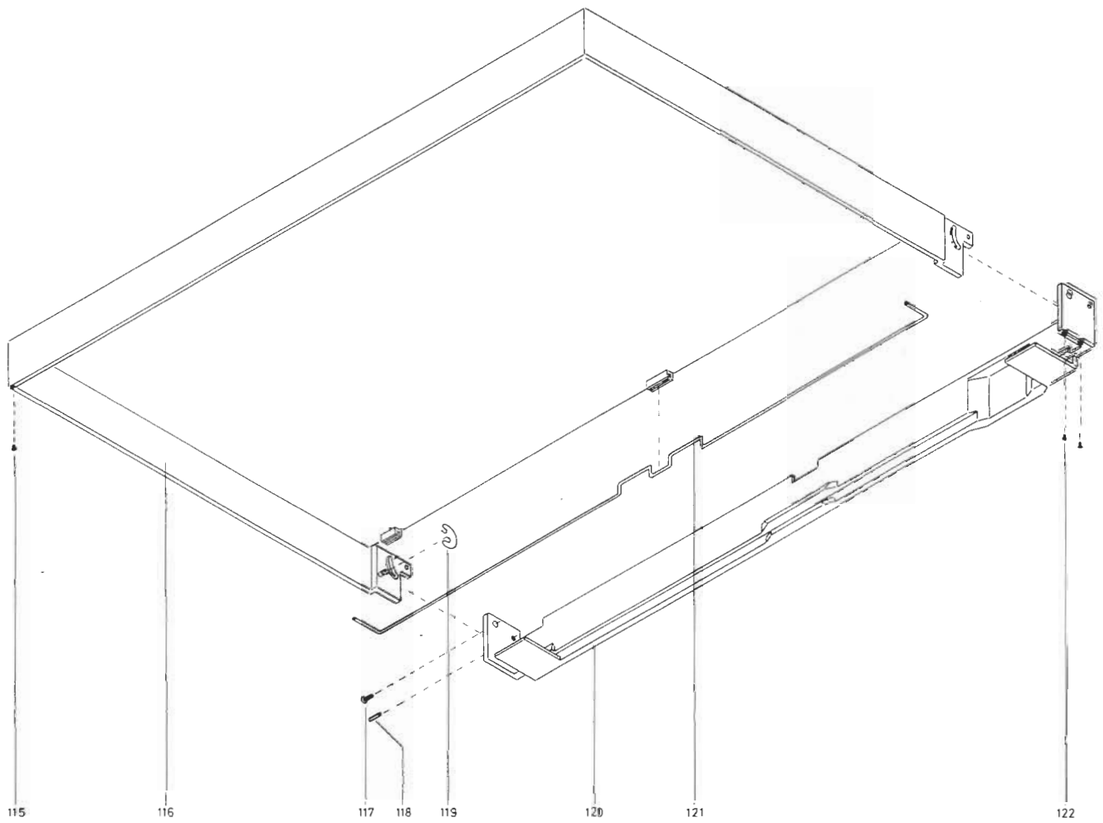


Bang & Olufsen

PARTS LIST BEOCENTER 1800, TYPE 2610

1	2038235	Screw AM 3 x 25 DIN 84
2	3152100	Aerial holder
3	3358098	Heat sink
4	2038259	Screw AM 3 x 8 DIN 84
5	2622024	Washer
6	2548111	Bracket
7	2039903	Screw AM 3 x 5 DIN 84
8	8013114	Transformer
9	2938081	Rubber bushing
10	8010020	Aerial transformer
11	7211047	Speaker socket
12	3454190	Chassis
13	2013212	Screw 2,84 x 6,35 ART 4261
14	2622052	Washer, fibre
15	2038951	Screw AM 3 x 6 DIN 963
16	2938081	Rubber bushing
17	2622024	Washer 4,2
18	2042240	Screw AM 4 x 10 DIN 84
19	2013203	Screw 2,84 x 12,7 ART 4261
20	8002269	PC board
	7400108	Pushbutton switch 2 sec.
	7400109	Pushbutton switch 7 sec.
	7450019	Mains switch MEC
	2819095	Spring for pushbutton switch
21	3412033	Cabinet plate right/left rosewood
	3412035	Cabinet plate right/left white
22	3112157	Chassis bracket
23	2038951	Screw AM 3 x 6 DIN 963
24	2038951	Screw AM 3 x 6 DIN 963
25	3170121	Mica sheet
26	2938104	Insulating bushing
27	2622024	Washer
28	2039901	Screw AM 3 x 8 DIN 84
29	0534104	Housing for mains-voltage switch
30	7401001	Mains-voltage switch
31	6600006	Fuse 1A-T 250V
32	3164066	Cover
33	3120194	Plate for fuseholder
	7500033	Contact spring for fuse
34	7211050	Aerial socket COAX
35	7211042	Aerial socket
36	2015200	Screw 3,5 x 6,35 ART 4261
37	2622052	Washer, fibre
38	7211049	DIN socket 5 pol.
39	2641062	Locking plate
40	2641061	Bushing
41	8002272	PC-board
42	3152063	Holder
43	8002280	PC-board
44	3170138	Insulating piece
45	2380011	Nut M3
46	2625002	Tooth-lock washer
47	2548112	Bracket
48	2038208	Screw AM 3 x 5 DIN 84
49	2038208	Screw AM 3 x 5 DIN 84
50	5320016	Potentiometer
	2812044	Spring for dial drive
	3955001	Dial cord
51	3112145	Chassis bracket
52	2500005	Wedge
53	3454134	Bottom plate
54	0585027	Rubber foot
55	2038061	Screw AM 3 x 10 DIN 84
56	2622013	Washer 3,2
57	2640023	Bushing
58	3112106	Chassis bracket
59	2034211	Screw AM 2 x 6 DIN 84
60	2568241	Front moulding, lower
61	3015029	Slide for knob
62	2775239	Knob
63	2034211	Screw AM 2 x 6 DIN 84
64	3015053	Slide for knob
65	7210023	JACK-socket
66	2072703	Threaded pin
67	2775402	Knob, VOLUME
68	2938102	Bushing
69	2992054	Stop
70	8230050	Lamp 12V 30 mA
71	3152073	Holder
72	3370056	Lamp housing
73	3370050	Window, red
74	3370049	Lamp housing
75	3370058	Window, green
76	3352073	Holder
77	8230050	Lamp 12V/30 mA
79	3320038	Frame
80	8002286	Tuning unit complete
	5320017	Potentiometer
81	2568183	Front moulding, upper
82	2039903	Screw AM 3 x 5 DIN 7986
83	2625002	Tooth-lock washer 3,2
84	2038208	Screw AM 3 x 5 DIN 84
85	2548103	Bracket
86	8050054	Front-end unit
87	2548117	Bracket
88	2380047	Nut
89	2038206	Screw AM 3 x 4 DIN 84
90	2395032	Spire
91	2038951	Screw AM 3 x 6 DIN 963
92	3300039	Screen
93	3112133	Chassis bracket
94	2642021	Clamp
95	2992042	Stop
96	3152082	Holder for knob
97	2568122	Pushbutton
98	2039903	Screw AM 3 x 5 DIN 7986
99	2039903	Screw AM 3 x 5 DIN 7986
100	2548102	Bracket
101	2810008	Spring
102	2034211	Screw AM 2 x 6 DIN 84
103	3015027	Slide
104	2568242	Front moulding, middle
	3950280	Rubber moulding
105	2038206	Screw AM 3 x 4 DIN 84
106	2775400	Dial knob complete
107	2542414	Bracket with cord-pulley
108	2775239	Knob
109	2038208	Screw AM 3 x 5 DIN 84

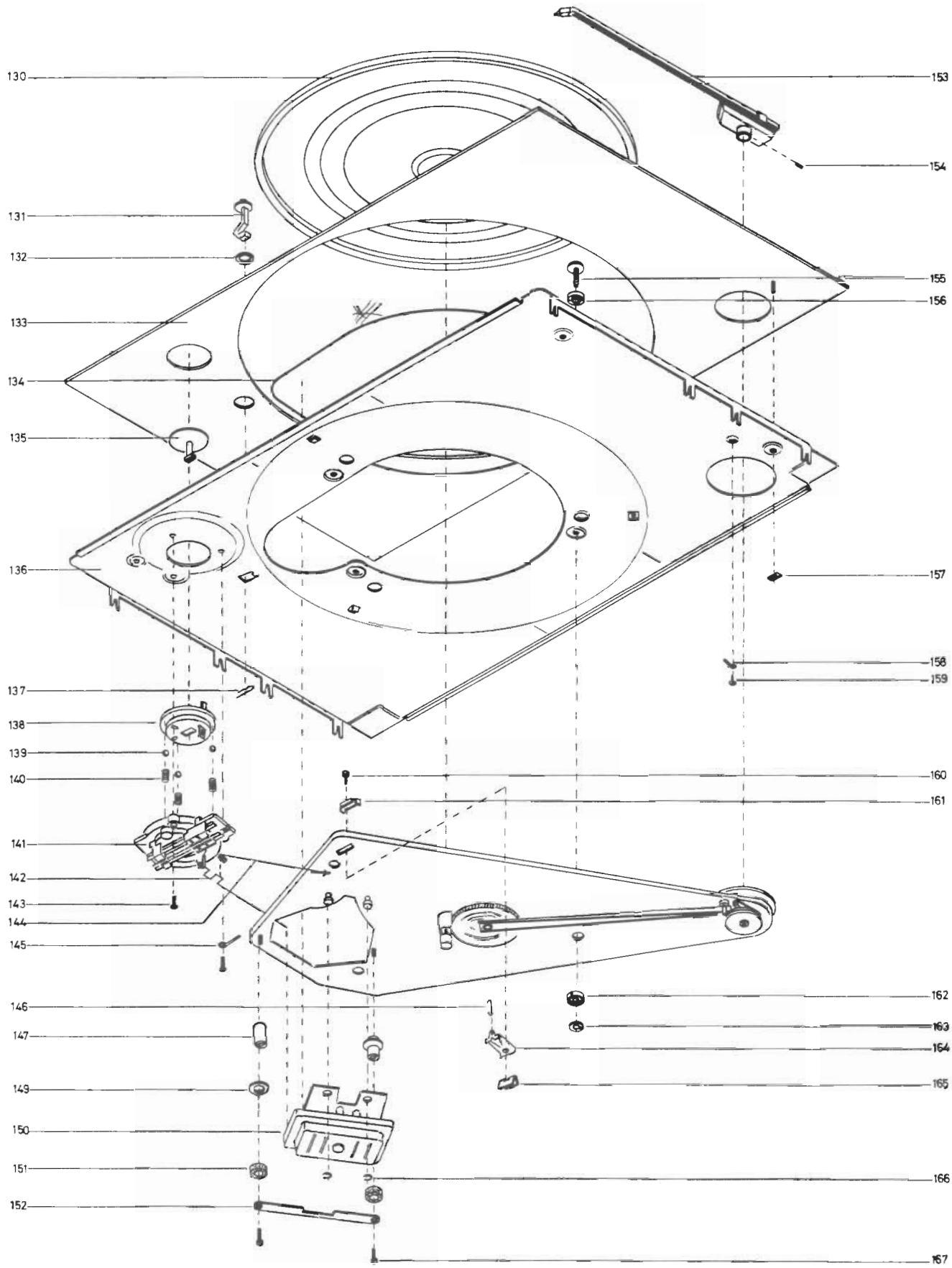

25 26 27 28
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 79 80 81
82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109



115	3010012	STOP
116	3064213	Dust cover
	2560042	Decorative list
117	2992063	Threaded pin
118	2830072	Bearing needle
119	2810078	Spring
120	3152187	Back plate
121	2819104	Spring
122	3341010	Stop
	3164211	Dust cover, complete

130	2726088	Turntable
	2620063	Felt
131	2770166	Knob
132	2620053	Felt washer
133	3458117	Top plate
134	2732035	Drive belt
135	2775401	Knob, lift
136	3112160	Chassis
137	2819102	Spring
138	2770162	Knob
139	2917011	Ball
140	2812062	Spring
* 141	3131112	Housing
142	2570022	Arm, speed
143	2038013	Screw AM 3 x 10 DIN 63
144	2570023	Arm, lowering
145	7530008	Solder tag
146	2514028	Hook
147	2576080	Spacer
149	2620061	Washer (transport)
150	8400077	Motor
151	2938113	Bushing (foam rubber)
152	2542416	Bracket
153	2850068	Pick-up arm complete
154	2072707	Threaded pin AM 3 x 6
155	2046204	Screw transit protection device
156	2938110	Washer for transit protection device
157	2395019	Spire
158	7530005	Solder tag
159	2013200	Screw 2,84 x 6,35
		ART 4261
160	2042209	Screw AM 4 x 10 DIN 84
161	2640031	Clamp
162	2938100	Bushing, lock
163	2622228	Washer
164	2815007	Leaf spring
165	2640032	Clamp
166	2390046	Lock disc
167	2042209	Screw AM 4 x 10 DIN 84

*See section 7, MODIFICATIONS, mechanical relay.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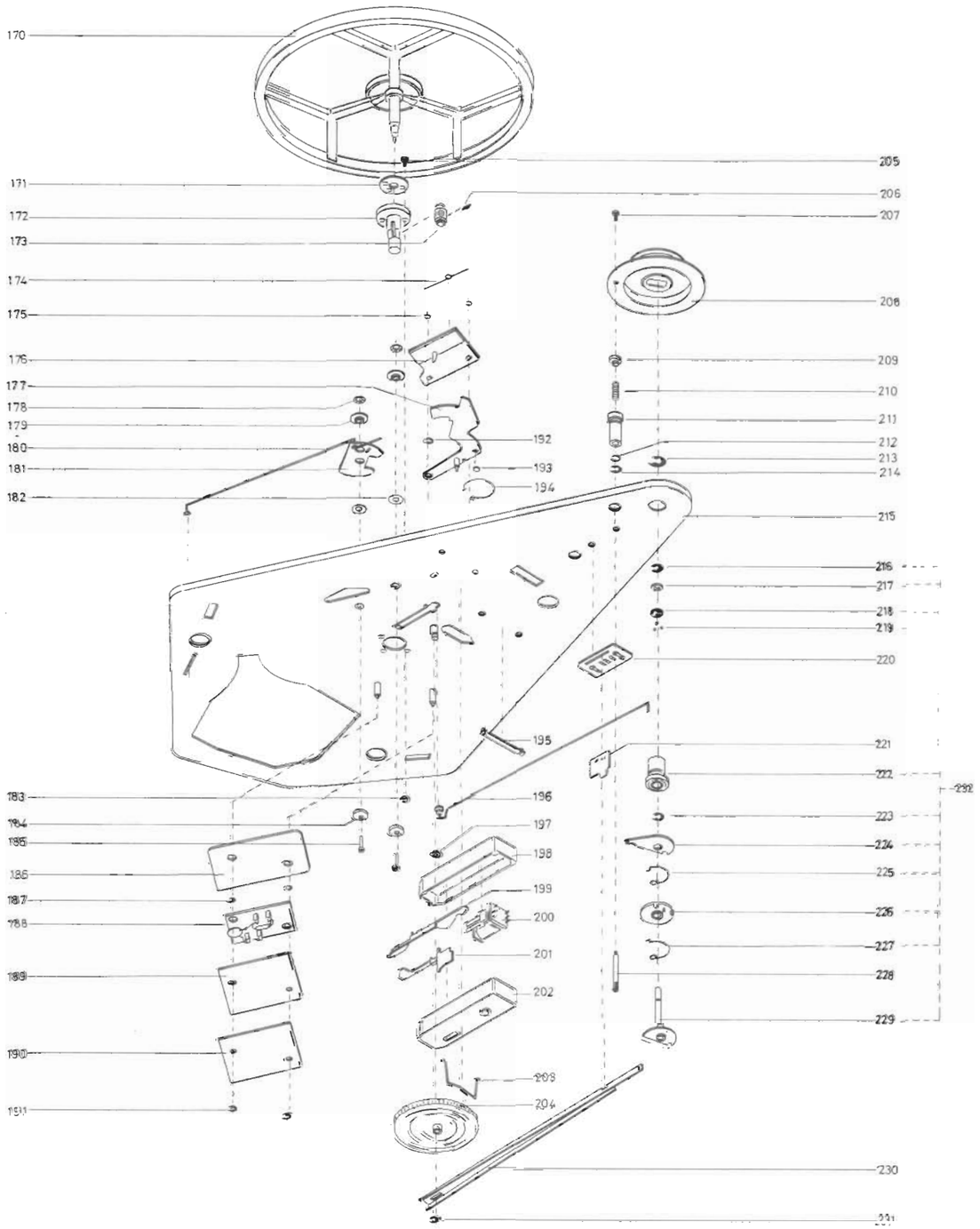
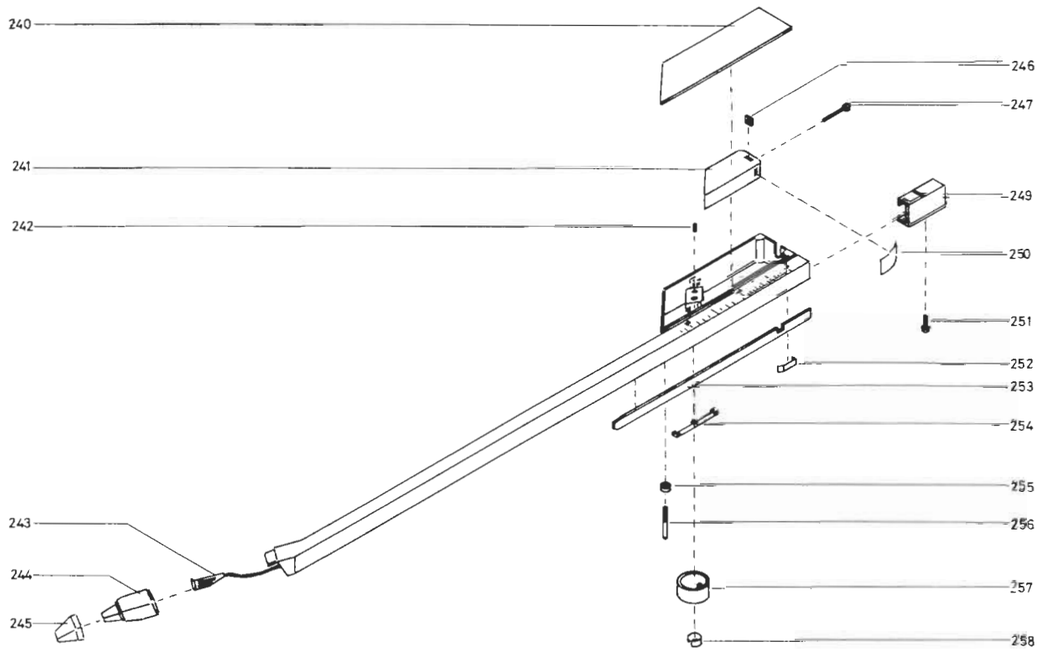


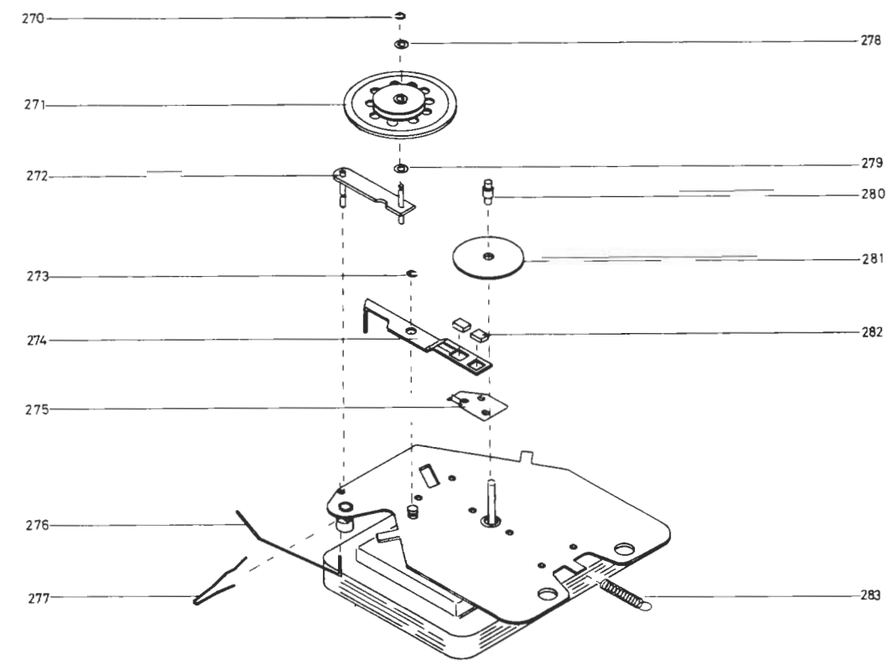
170	2794064	Flywheel
	2622230	Rubber disc
171	2905060	Bearing ring
172	3150037	Bearing bushing
173	2700014	Gear-wheel
174	2819114	Friction spring
175	2390002	Locking ring
176	3014025	Friction plate
177	3014031	Arm positioning guide
178	2395030	Lock disc
179	2938088	Washer
180	2570055	Arm
181	3014032	Arm positioning guide
182	2622198	Washer
183	2380013	Nut M3
184	2803005	Eccentric
185	2992048	Pin
186	3170141	Insulating piece
187	2390002	Locking ring
188	7536029	Tagstrip
	5001001	Resistor 10 Ohms 10% 1/2W
	4010050	Capacitor 10 uF 265 V
189	3170142	Insulating piece
190	3162091	Cover
191	2390001	Locking ring
192	2622136	Washer
193	3035020	Plastic foot
194	2819075	Spring
195	3152101	Lead holder
196	2850057	Arm
197	2905052	Adjustment collar
198	3131068	Housing
199	2854032	Arm
* 200	7600018	Relay
	4200279	El. capacitor 1 uF 250 V
	8300176	Diode
	5011017	Resistor 220 ohm 5% 1/2W
	7600027	Relay complete
	3947469	High-voltage insulating tape
201	2854031	Arm
202	3131067	Housing
203	2819076	Holder
204	3017010	Cam-lifting wheel
205	2038220	Screw AM 3 x 12 DIN 84
206	2361019	Locking pin
207	2038208	Screw AM 3 x 5 DIN 84
208	2623030	Lifting ring
209	2389041	Nut
210	2812063	Spring
211	3130054	Lifting device
212	2938103	Ring
213	2390069	Locking ring
214	2390065	Locking ring
215	3010006	Chassis
216	2390033	Locking ring
217	3152186	Ball holder
218	2938114	Bushing
219	2917017	Ball
220	7459014	Contact (silent)
	7530072	Solder tag
221	7459015	Contact (slide valve)
222	2938115	Pile bearing
223	2390033	Locking ring
224	2851088	Arm
225	2819106	Spring
226	2750018	Cluth disc
227	2819107	Spring
* 228	2855076	Lifting bar
229	2938116	Pile
* 230	2852025	Arm
231	2390046	Locking ring
232	2938111	Pickup-bearing complete

*See section 7, MODIFICATIONS:



*	240		Cover
*	241		Counterweight
	242	2070400	Threaded pin M 2 x 3
	243	6300063	PC-boards with leads
	244	8954390	Pickup unit MMC 3000
	245	3302230	Cap for pickup
	246	2380068	Nut M2
	247	2034924	Screw
	249	3190049	Pointer
	250	2815008	Spring
	251	2034205	Screw AM 2 x 6 DIN 84
	252	2815009	Spring
	253	3342024	Counterweight
	254	2568276	Guide rail for counter-weight
	255	2938096	Bushing
	256	2072924	Adjustment screw
	257	2938101	Bushing
	258	2815010	Spring

*See section 7, MODIFICATIONS, mechanical relay.



	270	2390002	Locking ring
	271	2804034	Idler wheel
	272	2851089	Arm
	273	2390002	Locking ring
	274	2854043	Arm
	275	3015068	Shim
	276	2570024	Arm
	277	2819115	Spring
	278	2620060	Washer
	279	2620060	Washer
	280	2804035	Stepped pulley
	281	2622241	Washer
•	282	3356031	Magnet
	283	2810079	Spring

PARTS NOT SHOWN

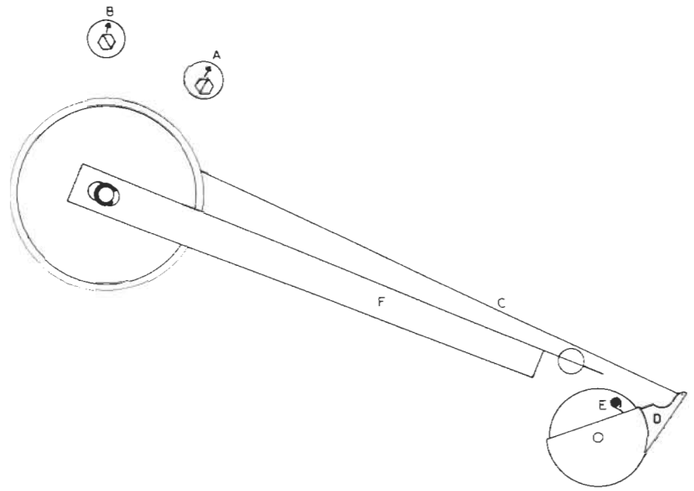
3532105	Instruction diagram
6271047	Mains lead
6250976	Pickup lead mounted
7220042	Contact housing
7500076	Contact plug
3152171	Transit protection device for pickup-arm
3391444	Packing, outer carton
3297212	Packing, top
3297213	Packing, bottom
3464211	Lid complete

SERVICE TIPS AND MODIFICATIONS

MOUNTING THE PICK-UP ARM

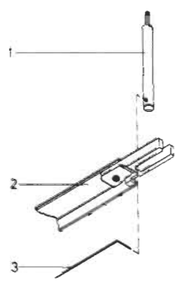
Set eccentric screws A and B so that they are at right angles to the arm F, as shown in the sketch. Set the record selector to the 17 position.
Rotate the turntable until the bar D stops its travel.
Hold the arm C in this position. Bring the pickup arm into position for landing at "17 cm" and fasten the pickup arm. Coarse adjustment of pickup landing can be made by turning the eccentric stud E with a pair of flat-nose pliers.
Fine adjustment, as previously described, is done with eccentric screws A and B.

Earlier units only have provision for fine adjustment with eccentric screws A and B.
In these units the pickup arm should therefore be positioned with special accuracy while it is being fastened.



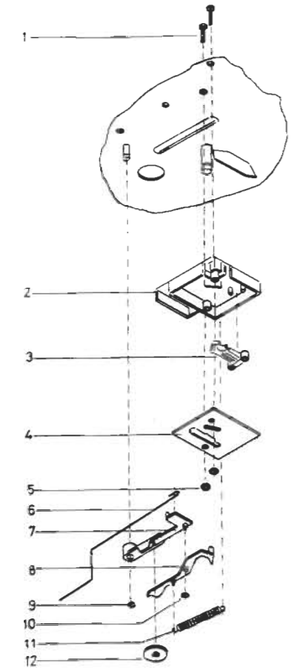
LIFT SYSTEM

As from No. 055001, the following modification to the lift system has been introduced.



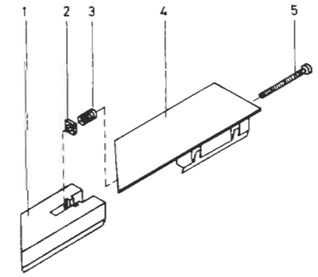
1	2850083	Lifting device
2	2852032	Lifting arm
3	2530326	Bracket

MECHANICAL RELAY



1	2038222	Screw AM 3 x 14 DIN 84	8	2853043	Switch arm
			9	2390002	Locking disc 3,2
2	3131121	Switch housing	10	2390001	Locking disc 2,3
3	7402081	Micro switch	11	2819122	Spring
4	3162095	Cover	12	2622246	Washer
5	2380011	Nut M3	141	3131124	Housing for LIFT-button
6	2570056	Arm			
7	2853042	Arm			

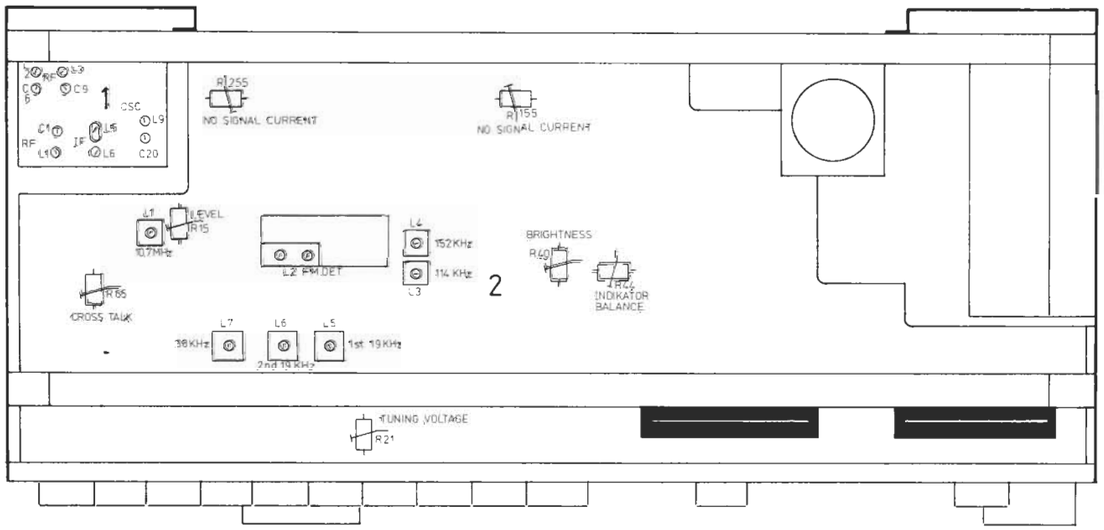
COUNTERWEIGHT



1	3342032	Counterweight
2	2380068	Square nut
3	2812072	Spring
4	3162093	Cover
5	2034913	Screw AM 2 x 16 DIN 84

Above-mentioned parts are delivered by number: 3342036.

In case of later servicing arround the counter weight system spare parts can be ordered separately under the above-mentioned code numbers.



Beomaster 1100, type 2609

CONDITIONS OF MEASUREMENT FOR DIAGRAM

All DC voltages are measured in proportion to chassis with voltmeter (inner resistance 11 MOhms).
DC voltages are measured with the receiver in position FM and an aerial signal of 500 uV (1 mV EMK) with pilot signal, volume on 0.
FM sensitivities are measured at Δf 40 kHz, f mod. 1 kHz and 10 W output.
AF sensitivities are measured at 22 W output. Balance, bass, treble on 0, volume on max.
Output loaded with 4 ohms, input 1 kHz.
Mechanical switches are shown in neutral position.

FM SENSITIVITIES

2TP1	60 uV (10.7 MHz) through 0.1 uF, RG 75 Ohms.
2TP2	170 uV (10.7 MHz) through 0.1 uF, RG 75 Ohms
2TP3	600 uV (10.7 MHz) through 0.1 uF, RG 75 Ohms

AF SENSITIVITIES

2TP100	2.5 mV
2TP200	2.5 mV
2TP101	135 mV
2TP201	135 mV
2TP102	150 mV
2TP202	150 mV
2TP103	500 mV
2TP203	500 mV

NO-SIGNAL CURRENT

2TP104	10 mV
2TP204	10 mV or:

25 mA in the collector of 2IC102, 2IC202.

MESSBEDINGUNGEN FÜR SCHALTBILD

Alle DC Spannungen sind in Verhältnis zu Chassis mit Voltmeter (innerer Widerstand 11 MOhm) gemessen.
DC Spannungen sind mit dem Empfänger in Stellung FM und dem Antennensignal von 500 µF (1 mV EMK) mit Pilotton gemessen, Volume auf 0.
UKW Empfindlichkeiten sind an Δf 40 kHz, f mod. 1 kHz und 10 W Ausgang gemessen.
NF Empfindlichkeiten sind an 22 W Ausgang gemessen. Balance, Tiefton, Diskant auf 0, Volume auf max. Ausgang mit 4 Ohm, Eingang 1 kHz belastet.
Mechanische Umschalter sind in neutraler Stellung gezeigt.

UKW EMPFINDLICHKEITEN

2TP1	60 uV (10,7 MHz) durch 0,1 uF, RG 75 Ohm.
2TP2	170 uV (10,7 MHz) durch 0,1 uF, RG 75 Ohm.
2TP3	600 uV (10,7 MHz) durch 0,1 uF, RG 75 Ohm.

NF EMPFINDLICHKEITEN

2TP100	2,5 mV
2TP200	2,5 mV
2TP101	135 mV
2TP201	135 mV
2TP102	150 mV
2TP202	150 mV
2TP103	500 mV
2TP203	500 mV

LEERLAUFSTROM

2TP104	10 mV
2TP204	10 mV oder:

25 mA im Kollektor von 2IC102, 2IC202.

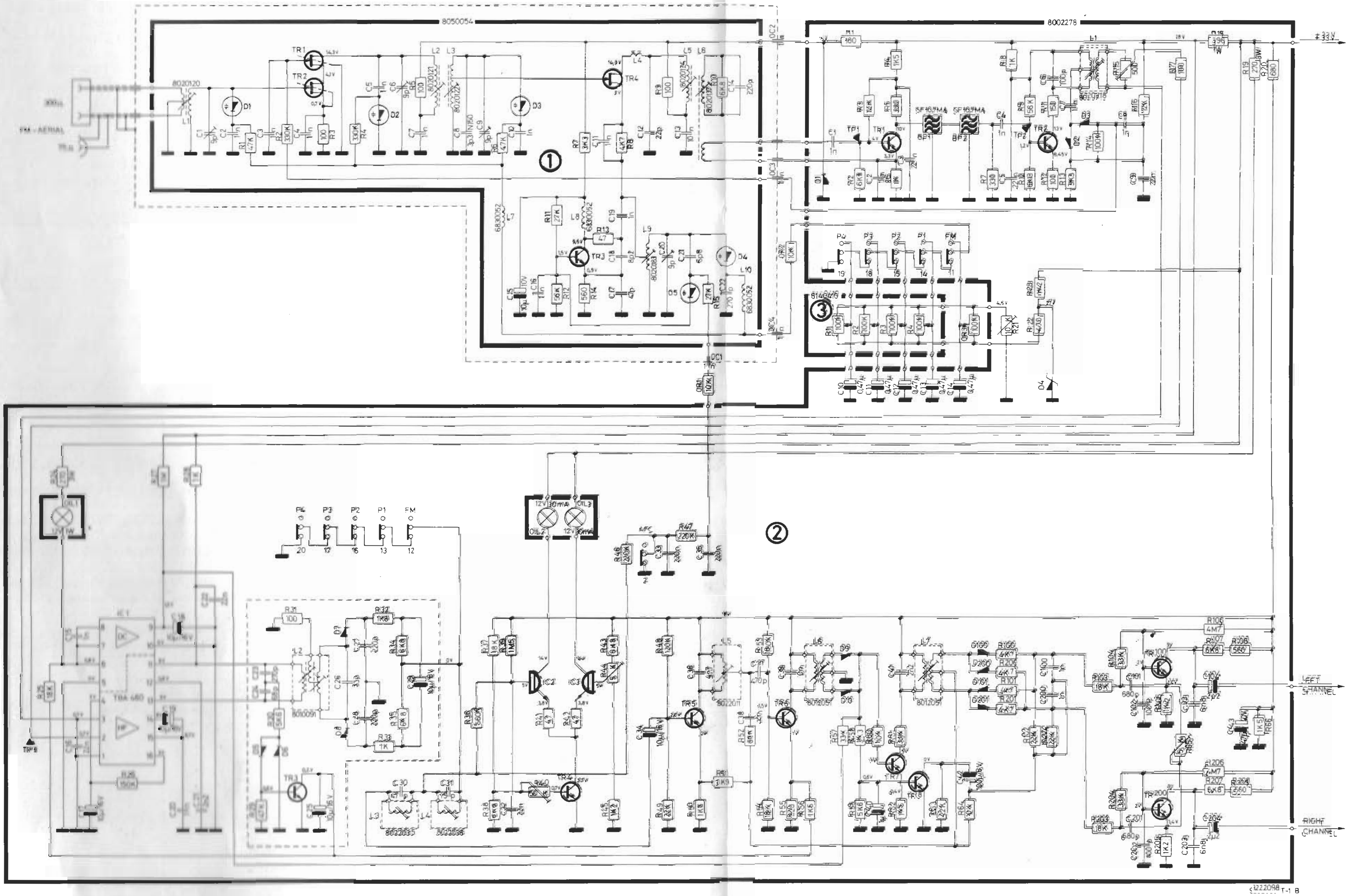
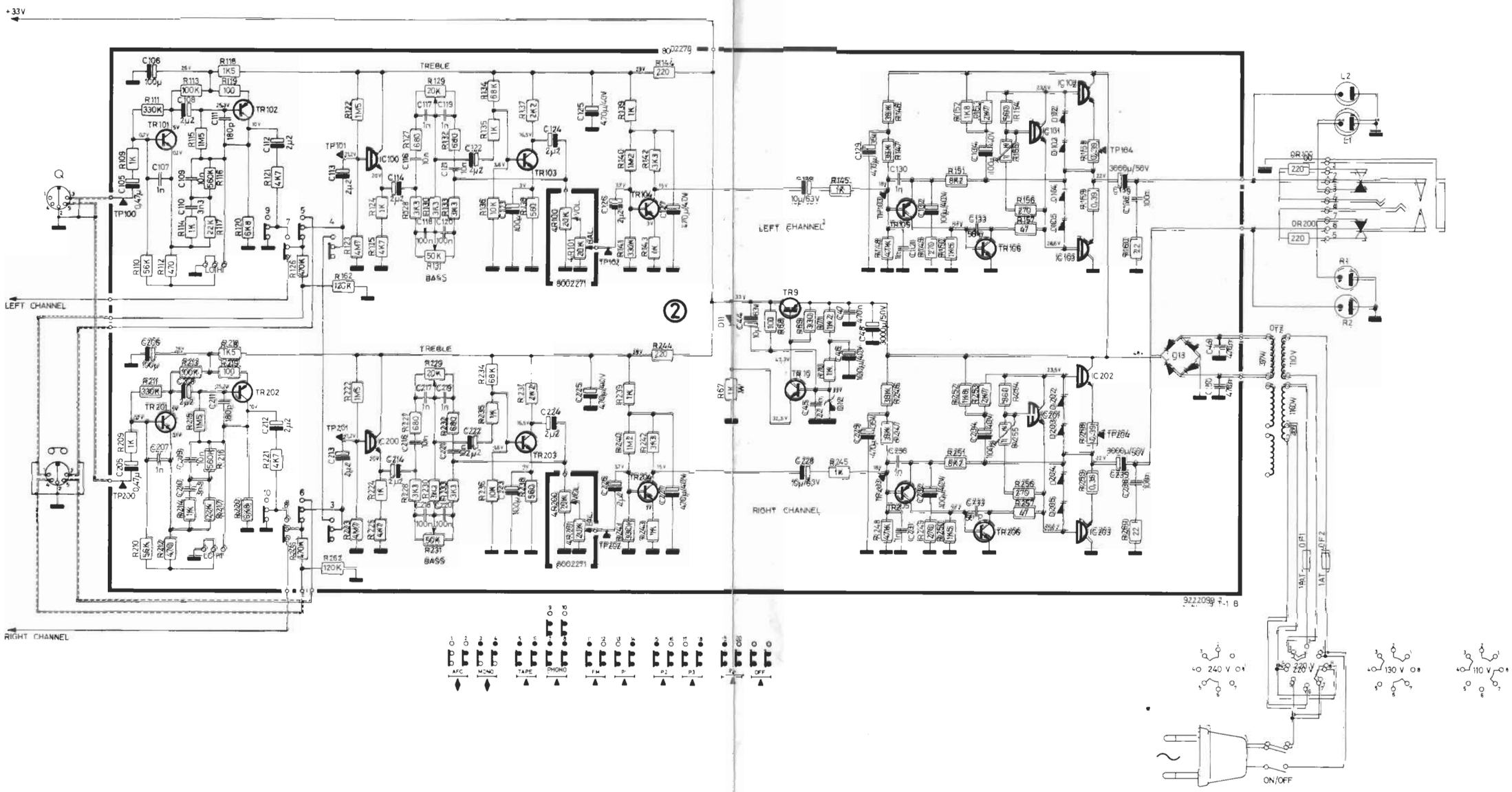

FM-AERIAL
8050054
8002278
+33V
LEFT CHANNEL
RIGHT CHANNEL
TBA 680
SF10.7MA
1222098 T-1 B

DIAGRAM 1



MÅLEBETINGELSER FOR DIAGRAM

Alle DC spændinger er målt i forhold til stel med voltmeter (indre modstand 11 MOhm).
DC spændingerne er målt med modtageren i stilling FM og Antennesignal på 500 uV (1 mV EMK) med pilottone, volume på 0.
FM følsomheder er målt ved Δf. 40 kHz, f. mod. 1 kHz og 10 W output.
LF følsomheder er målt ved 22 W output. Balance, bas, diskant på 0, volume på max.
Udgang belastet med 4 Ohm, input 1 kHz.
Mekaniske omskiftere er vist i neutral stilling.

FM FØLSOMHEDER

2TP1	60 µV (10,7 MHz) gennem 0,1 µF, RG 75 Ohm.
2TP2	170 µV (10,7 MHz) gennem 0,1 µF, RG 75 Ohm.
2TP3	600 µV (10,7 MHz) gennem 0,1 µF, RG 75 Ohm.

LF FØLSOMHEDER

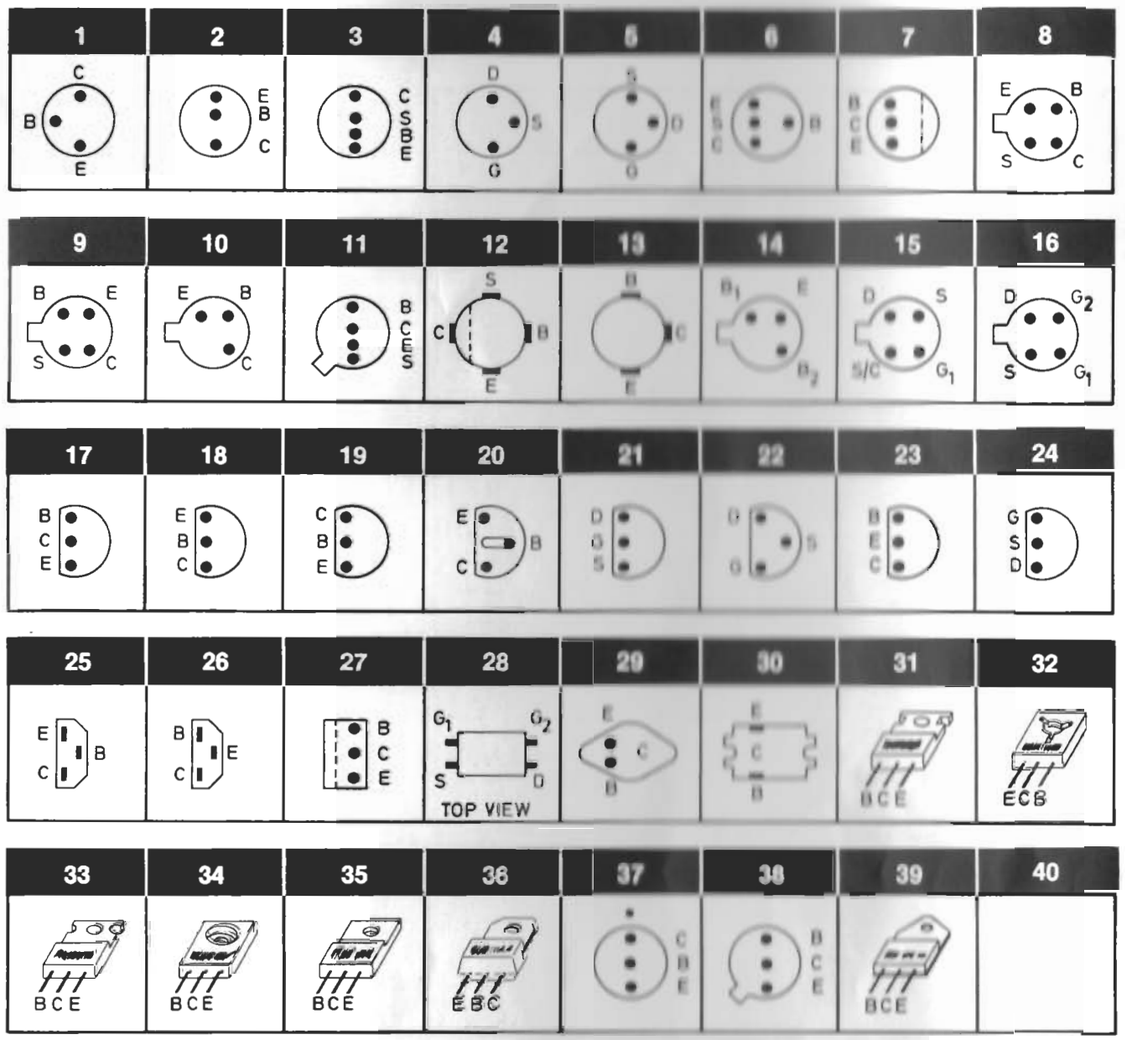
2TP100	2,5 mV
2TP200	2,5 mV
2TP101	135 mV
2TP201	135 mV
2TP102	150 mV
2TP202	150 mV
2TP103	500 mV
2TP203	500 mV

TOMGANGSSTRØM

2TP104	10 mV
2TP204	10 mV eller:

25 mA i kollektoren af 2IC102, 2IC202.

DIAGRAM 2



TRANSISTOR LIST

1TR1	8320119	**4**	U 1981 E
1TR2		**21**	2N 5245
		21	TIS 88 A
1TR3	8320112	**26**	BF 195
1TR4	8320136	**4**	U 1981 E
		5	U 1837 E
		21	2N 5245
		21	3 C 2
		22	3 C 2 P
		21	TIS 88 A
2TR1	8320089	**26**	BF 194
2TR2			
2TR3	8320097	**20**	BC 547 B
2TR4		**18**	BC 237 B
		20	BC 171 B
		19	BC 317 B
		20	BC 182 B
		17	BC 182 BL
		20	BC 182 BK
		1	BC 207 B
2TR5	8320095	**20**	BC 549 B
		20	BC 184 B
		17	BC 184 BL
		20	BC 184 BK
2TR6	8320097	**20**	BC 547 B
2TR7		**18**	BC 237 B
2TR8		**20**	BC 171 B
		19	BC 317 B
		20	BC 182 B
		17	BC 182 BL
		20	BC 182 BK
		1	BC 207 B
2TR9	8320269	**32**	BD 236 B
		32	BD 236 W
		32	BD 178
2TR10	8320295	**20**	BC 337
		20	BC 337-25
2TR100/200	8320138	**20**	BC 183 B
		17	BC 183 BL
		20	BC 183 BK
2TR101/201	8320095	**20**	BC 549 B
		20	BC 184 B
		17	BC 184 BL
		20	BC 184 BK
2TR102/202	8320069	**1**	BC 154
		19	BC 322 B
		18	BC 309 B
		20	BC 214 B
		17	BC 214 BL
		20	BC 214 BK
		20	BC 559 B
		18	BC 253 B
2TR103/203	8320095	**20**	BC 549 B
		20	BC 184 B
		17	BC 184 BL
		20	BC 184 BK
2TR104/204	8320097	**20**	BC 547 B
		18	BC 237 B
		20	BC 171 B
		19	BC 317 B
		20	BC 182 B
		17	BC 182 BL
		20	BC 182 BK
		1	BC 207 B
2TR105/205	8320069	**1**	BC 154
		19	BC 322 B
		18	BC 309 B
		20	BC 214 B
		17	BC 214 BL
		20	BC 214 BK
		20	BC 559 B
		18	BC 253 B
2TR106/206	8320097	**20**	BC 547 B
		18	BC 237 B
		20	BC 171 B
		19	BC 317 B
		20	BC 182 B
		17	BC 182 BL
		20	BC 182 BK
		1	BC 207 B
2IC2	8340054	**19**	MPS A13
2IC3			
2IC100/200	8340028	**19**	MPS A13
2IC101/202		**19**	SPS 5418
2IC102/202	8340027	**34**	BD 697
2IC103/203	8340023	**34**	BD 698

DIODE AND IC LIST

1D1	8300050	BB 103 blue
1D2-1D3	8300041	BB 103 green
1D4	8300050	BB 103 blue
1D5	8300032	BA 138
2D1	8300053	ZDP 15 V BZX 79 15 V
2D2-2D3	8300131	1N 4148
2D4	8340081	27 V reg.
2D5-2D10	8300024	AA 119
2D11	8300023	EM 502 1N 4002 1N 4003
2D12	8300199	33 V 1W 5% ZPY 33 BZX 61 C 33
2D13	8310020	B 80 C 3200/2200
2D100-2D203	8300131	1N 4148
5D1-5D2	8300058	SFD 184 1N 4148
5D3	8300023	EM 502 1N 4002 1N 4003
7D1-7D2	8300131	1N 4148
7D3	8300137	ZY 13 1,1W
2IC1	8340014	TBA 460

BEOMASTER 1100, TYPE 2609

20	8002278	PC-plade	PC-board
21	3411931	Kabinetside, venstre, teak	Cabinet side, left, teak
	3411933	Kabinetside, venstre, Palisander	Cabinet side, left, rosewood
	3411934	Kabinetside, venstre, eg	Cabinet side, left, oak
	3411936	Kabinetside, venstre, sort	Cabinet side, left, black
	3412061	Kabinetside, højre, teak	Cabinet side, right, teak
	3412063	Kabinetside, højre, palisander	Cabinet side, right, rosewood
	3412064	Kabinetside, højre, eg	Cabinet side, right, oak
	3412066	Kabinetside, højre, sort	Cabinet side, right black
22	3112114	Vinkel	Bracket
53	3454116	Bund	Bottom plate
60	2568271	Frontprofil, nederste	Moulding, bottom front
81	2568239	Frontprofil, øverste	Moulding, upper front

IKKE VISTE DELE

NOT SHOWN PARTS

7210099	Stikpanel 75/300 Ohm	Socket panel 75/300 Ohms
3532114	Instruktionsdiagram	Instruction diagram
3411551	Kabinettopplade, teak	Cabinet top, teak
3411553	Kabinettopplade, palisander	Cabinet top, rosewood
3411554	Kabinettopplade, eg	Cabinet top, oak
3411556	Kabinettopplade, sort	Cabinet top, black
3452221	Bagplade, højre	Back plate, right
3452223	Bagplade, venstre	Back plate, left
2568227	Profil til topplade	Moulding for cabinet top
3391410	Top/bund indlæg	Top/bottom insert
3391411	Yderæske	Outer carton
3397176	Skumemballage	Foam packing

Øvrige dele som BEOCENTER 1800, type 2610

Other parts as BEOCENTER 1800, type 2610

BEOMASTER 1100, TYP 2609

20	8002278	Printplatte	CIRCUIT IMPRIME
21	3411931	Gehäuse, links, Teakholz	EBENISTERIE, GAUCHE, TECK
	3411933	Gehäuse, links, Palisander	EBENISTERIE, GAUCHE, PALISSANDRE
	3411934	Gehäuse, links Eiche	EBENISTERIE, GAUCHE, CHENE
	3411936	Gehäuse, links, Schwarz	EBENISTERIE, GAUCHE; NOIR
	3412061	Gehäuse, recht, Teakholz	EBENISTERIE, DROIT, TECH
	3412063	Gehäuse, recht, Palisander	EBENISTERIE, DROIT, PALISSANDRE
	3412064	Gehäuse, recht, Eiche	EBENISTERIE, DROIT, CHENE
	3412066	Gehäuse, recht, Schwartz	EBENISTERIE, DROIT, NOIR
22	3112114	Winkel	EQUERRE
53	3454116	Boden	FOND
60	2568271	Frontprofil, unterste	PROFILE DE FACE, BAS
81	2568239	Frontprofil, oberste	PROFILE DE FACE, HAUT

NICHT GEZEIGTE TEILE

DIVERS (NON INDIQUE)

7210099	Steckpanel 75/300 Ohm	PRISE FEMELLE 75/300 OHM
3532114	Schaltbild	SCHEMA
3411551	Gehäuse, Teakholz	EBENISTERIE, TECK
3411553	Gehäuse, palisander	EBENISTERIE, PALISSANDRE
3411554	Gehäuse, Eiche	EBENISTERIE, CHENE
3411556	Gehäuse, Schwarz	EBENISTERIE, NOIR
3452221	Rückwärtige abdeckung, recht	PLAQUE ARRIERE, DROIT
3452223	Rückwärtige abdeckung, links	PLAQUE ARRIERE, GAUCHE
2368227	Profil für Gehäuse	PROFILE POUR EBENISTERIE
3391410	Obere/untere Einlage	PLAQUES INTERIEURES HAUT/BAS
3391411	Aussenkarton	BOITE EXTERIEURE
3397176	Schaumstoffverpackung	EMBALLAGE POLUSTYRENE

Übrige Teile wie BEOCENTER 1800, Typ 2610.

LES AUTRES PIECES SONT IDENTIQUE A CELLES DU BEOCENTER 1800, TYPE 2610